



14.0 CHECK POINTS BEFORE TROUBLE SHOOTING.

In this chapter we have some general check points that have to be examined first if something is wrong with the machine. In chapter 17.0 we have a more detailed trouble shooting.

There are three basic assumptions that have to be fulfilled if the machine shall function properly:

1. The oil pressure from tractor should be 180 bar.
2. The return flow of oil has to be as free as possible, **max. 10 bar counter pressure.**
3. Enough electric power to all functions.

14.1 OIL PRESSURE.

In order to check that the oil pressure into the machine is high enough, a guage may be applied to the oil pressure hose, for example on the quick coupler.

If the pressure is less than 180 bar, there will be less power for the functions. The first place you trace this is at the ROLLERS OUT / IN.

OIL AMOUNT.

The oil amount that the tractor delivers must be **minimum 15 liters/minute**, but it is recommended that it is 25 liters/minute. (Max. allowed oil amount is 40 liters/minute).

REMEMBER! Large oil amount = Valves get hot. (Small oiltank = insufficient cooling).

14.2 RETURN PRESSURE.

The return pressure can be too high. With high return pressure the machine's functions will get less power. High return pressure means also that you need more power to operate the valves.

MAX. ALLOWED RETURN PRESSURE IS 10 BAR.

We recommend "free return" directly to the tank.

14.3 ELECTRIC POWER.

It is important to check that all functions receive enough electric power.

If not, some, or all functions may fail.

Is the battery voltage high enough?

If the voltage falls below 9 volts the valves will not be able to open.

Are the cables correctly connected to the battery?

Follow directions in chapter 4.4

Is the connection between battery cable and control unit OK?

Clean off the poles and check the plug.

Is the connection between remote control unit and machine OK?

Change contacts if any doubt about the condition.

Is the fuse on the battery cable OK?

PLEASE CONTACT YOUR DEALER IF YOU ARE IN DOUBT ABOUT ANYTHING.

(Remember always to give your dealer the serial number and production year of your machine when contacting dealer and when ordering spare parts).



11.0 TROUBLE SHOOTING.

BEWARE OF MOVING PARTS WHEN TESTING THE MACHINE.

11.1 THE MACHINE DOES NOT WORK.

- a) The gauge shows that there is enough pressure but there is no reaction from the machine. The problem can be that one or both of the quick couplers are not opening to let the oil through.

Change the quick couplers.

- b) The return pressure may be too high.
Max. return pressure is 10 bar

11.2 THE TABLE WILL NOT ROTATE.

- a) The safety valve on the motor, may be leaking, so that the oil passes the motor. Disengage the valve and check that the piston moves freely.
- b) Check if the oil motor is working.
Ask your dealer for advice BEFORE you make the error larger and more difficult to repair.

11.3 LOAD ARM, TILT, TABLE OR CUTTER DOES NOT FUNCTION.

The cables have degraded, and must be replaced or there is a loose connection somewhere. Consult your dealer.

11.4 RETURN OFF KNIFE CYLINDER. PRESSURE SETTING THE ACCUMULATOR.

- A. Drive the knife cylinder to closed position.
- b. Remove plug from the diverter valve behind the accumulator.
- c. Connect hose from + knife cylinder on the diverter valve.
- d. Open the knife with knife close function. (low pressure)
- e. Connect hose back to knife cylinder
- F. Test the knife.
- G. If the knife does not close, let out oil pressure on the return side of the knife cylinder until the knife is closed
- H. If the knife does not open, the pressure on return side is too high.

11.5 THE KNIFE WILL NOT HOLD THE PLASTIC FILM.

Check the pressure in the accumulator



15. FAULT FINDING (ROUND BALE MODELS)

PROBLEMS

Driver roller and Bale belt not driving.

Film not wrapping evenly

Film breaking

Hydraulic bale ramp not returning to raised position after tripping off Bale.

Pull down arm will not stay down on film when tipping off Bale.

Hydraulic Cut & Start

Cylinder will not go out all the way.

Cut and Start closed and will not open.

Cut & Start will not close

When tipping up turntable and if it does not stop and cut but Continues Tipping up.

REMEDY

Check if shear pins have sheared in sprocket on drive roller if so, Replace.

Adjust the film mast, so that centre of film roll is in-line with the centre of the Bale

Wash off the dispenser.
Change film roll
Use only recommended film.

Hydraulic cylinder loss of oil pressure, Recharge see instruction Manual.

Restrictor not fitted or dirt under seat of restrictor.

Hydraulic pressures in tractor not high enough (bad pumps) or too much oil pressure in accumulator side of cylinder over 60 bar.

Pressure lost in accumulator side of cylinder, seals leaking across, or oil leak from gland.

Poppet valve open must have more than 4 revolutions of turntable before Cut & Start will close, or dirt under poppet valve

Check wiring and button switch, if all wires check out ok, dirt might be the problem in the six-port diverter valve, if so disassemble and clean out with petrol or gasoline



15.0 PROCEDURE OF TROUBLE SHOOTING.

15.1 SOLENOID VALVES.

When checking if the Solenoid valves are receiving electric power, you do this in the following way:

1. Unscrew the nut that holds the solenoid.
2. The solenoid is easy to move without electric power.
3. Push the current function on the remote control. If the solenoid gets power, it will be difficult to move, it "sticks". This is the best and easiest way to check if the solenoid valve is receiving electric power. Another way is to hold a screwdriver up to the magnet. If it "sticks", the solenoid is receiving electric power.

The power supply to the valve can also be measured with a voltmeter, but then the contact must be connected to the solenoid, so it is using power.

To have reliable functions, the voltage should not be lower than 11,5 volts, even if the solenoid valve usually works with a little lower voltage.

15.2 Only for solenoid valves to the main functions.

If the electric supply is in order and one of the functions fails, the reason can be dirt that tightens or prevents the sliding shaft (spool) from moving.

Try to maneuver the function manually, by pressing the point of a screwdriver into the end of the valve housing. **At the same time the corresponding switch on the control unit has to be operated to get electric power to the master valve.** If the function is working again after this, the dirt may have been pushed out in the oil system and the machine can be operated normally again.



Take care so that the machines moving parts, do not cause damage to persons or objects.



16.0 TROUBLE SHOOTING.

16.1 THE MACHINE DOES NOT FUNCTION.

- a) Even if the gauge shows enough pressure and there is no reaction in the machine. The reason could be that one, (or both), of the quick-couplers does not open for the oil.
Change quick couplers.
- b) The counter pressure could be too high.
Max. allowed counter pressure is 10 bar. (See chapter 14).
- c) Make sure that the open / closed valve is correctly positioned.

(Disturbances of this type, a, b or c, are most likely in the first days that the machine is in use).

16.3 THE CUTTER WILL NOT HOLD THE FILM.

The pressure is falling and the springs start to lift the cutter. (See chapter 14.2).

16.4 THE WRAPPING ARM WILL NOT ROTATE.

- a) The bolt that secures the wrapping arm during transport has to be removed so that the wrapping arm can move freely.
- b) Check valve 1. (See fig. 13-2). Screw all the way in and test. Adjust to required power.
- c) The safety valve, (S3, fig. 13-2), can be leaking, so that the oil is passing by the wrapping arm motor. Dismantle and try out if the sliding shaft can move freely .
- d) The control valve, may be blocked. Dismantle and check if the valve works normally. Do not use sharp tools
- e) Check if the oil motor is working
Ask your dealer for advice BEFORE you make the problems bigger and repairing more difficult
- f) If the emergency stop* has been activated. To start the machine the control box must be reset (See also chapter 5.0).

16.5 THE ROLLER WILL NOT ADJUST.

I. Is the Solenoid valve receiving enough electric power ?

When the power source is tapped by several users at ones, the voltage can fall so much that all the functions will cut out, or only the width regulating. Check the power source and measure the voltage.

I. Check the bypass valve

If this is receiving enough power and has free flow ,the problem must lie in the solenoid valve.

