

SLA, SLC

Troubleshooting

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1.0 General

1.1 The Machine Does Not Start

The machine does not start.	
The “Emergency Stop” is engaged.	Reset the E-stop
The “Main Disconnect” switch is in the “Off” position.	Turn the switch to the “On” position.
The DC power supply does not operate correctly.	Make sure that the input and output voltages are correct. Examine, replace the fuses.
The “Belt Slack” switch does not operate correctly.	Make sure that there is no blockage in the path of the FDS. Examine, replace the switch.
There are blown fuses.	Examine, replace the fuses.
The operator did not hold the “Start” button for 3 seconds.	Push and hold the “Start” button for 3 seconds to engage the Automatic sequence.
The access gate is open.	Close the gate.
The FDS gate is open.	Close the gate.
A component is not in the home position.	Move all components to the home position.
There is a fault condition.	Correct the fault.
The load height sensor does not see the load in the wrap zone.	Measure the height of the load. Make sure that the dimensions are in the range for the sensor. Adjust, replace the sensor.
The load height sensor does not see the short load.	"If the machine does not have the “Short Load” option, measure the height of the load. Make sure that the dimensions are in the range for the sensor. "
"The “Short Load” sensor does not see the load in the wrap zone. (This is for machines with the “Short Load” option.)"	Examine, adjust the “Short Load” sensor.

1.2 Machine Stops During the Wrap Cycle

The machine stops during the wrap cycle.	
There is a fault condition.	Correct the fault.
The FDS gate is open.	Close the gate.

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1.3 Film breaks

1.3.1 Film Breaks at the Start of the Wrap Cycle

The film breaks at the start of the wrap cycle.	
There is damage to the film roll.	Remove the damaged film. Replace the film roll
The film is not threaded correctly.	Refer to the diagram to thread the film.
There is adhesive from the film on the roller.	Use ammonia, detergent to clean the rollers.
The timer for the “Reduced Wrap Force Delay” is set too low. The Wrap Force engages too quickly.	Adjust the timer.
The film pulls out of the clamp.	There is damage to the bladder. Examine, replace the bladder.

1.3.2 Film Breaks During the Wrap Cycle

The film breaks during the wrap cycle.	
There is damage to the film roll.	Remove the damaged film. Replace the film roll
The film is not threaded correctly.	Refer to the diagram to thread the film.
There is adhesive from the film on the roller.	Use ammonia, detergent to clean the rollers.
There is damage to the pre-stretch rollers.	Replace the rollers.
There is damage to the idler rollers.	Replace the rollers.
The Film Tension/Wrap Force is set too high.	Decrease the setting.
There are sharp edges on the load, skid.	Remove the sharp edges. Decrease the Film Tension/Wrap Force

1.4 Load Does Not Wrap with the Correct Film Tension/Wrap Force

The load does not wrap with the correct Film Tension/Wrap Force	
The Film Tension/Wrap Force is set too low	Increase the setting.

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1.5 Film Winds Around the Pre-stretch Rollers

The film winds around the pre-stretch rollers.

Caution: Do not use a sharp object to remove the film that is wound onto the pre-stretch roller.

There is adhesive from the film on the roller.	Use ammonia, detergent to clean the rollers.
There is damage to the pre-stretch rollers.	Replace the rollers.

1.6 Auto, Bypass Modes do not Engage

The “Auto” or “Bypass” modes do not engage.

The FDS gate is open.	Close the gate.
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2.0 Film Delivery System (FDS)

2.1 FDS Does Not Apply the Film

The FDS does not apply the film.

There is damage to the film roll.	Remove the damaged film. Replace the film roll
The film is not threaded correctly.	Refer to the diagram to thread the film.
There is adhesive from the film on the roller.	Use ammonia, detergent to clean the rollers.
There are loose wire connections.	Examine the wire connections between the drive controls and the FDS motor.
There is damage to the chain for the pre-stretch drive.	Examine, replace the drive chains and sprockets.
The idler rollers do not turn freely.	Make sure that there is no film buildup around the bearings. Examine, replace the rollers.
The pre-stretch rollers do not turn freely.	Look for blockage around the rollers and bearings.
The load cell does not operate correctly.	Examine, replace the load cell. Examine the load cell and adjust the pressure in the direction of the arrow.
The load cell is not set correctly.	Make sure that the force is applied in the direction of the arrow on the load cell.

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2.2 FDS does not Move Up, Down

2.2.1 FDS Does Not Move Up When you Push the “Up” Button

Push the “Up” button and the Elevator/FDS does not move up.	
The FDS shipping bracket is installed.	Remove the bracket.
The speed for the FDS is set too low.	Adjust the speed.
The sensor for the "FDS Up" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor. Examine, replace the sensor.
The drive control for the FDS lift does not operate correctly.	Make sure that the input and output voltage to the drive control is correct. Examine the armature wires on the lift motor.
The FDS does not move freely.	Make sure that there is no blockage in the path of the FDS. Examine the guide rollers for blockage. Examine the FDS lift belt for a slack condition. Examine, replace the “Belt Slack” switch. Examine the cable for damage. Make sure that the cable connects with the switch.

2.2.2 FDS Does Not Move Down When You Push the “Down” Button

Push the “Down” button and the Elevator/FDS does not move down.	
The FDS shipping bracket is installed.	Remove the bracket.
The speed for the FDS is set too low.	Adjust the speed.
The sensor for the "FDS Down" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor. Examine, replace the sensor.
The drive control for the FDS lift does not operate correctly.	Make sure that the input and output voltage to the drive control is correct. Examine the armature wires on the motor for the FDS lift.
The FDS does not move freely.	Make sure that there is no blockage in the path of the FDS. Examine the guide rollers for blockage. Examine the FDS lift belt for a slack condition. Examine, replace the “Belt Slack” switch. Examine the cable for damage. Make sure that the cable connects with the switch.

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There is a slack condition on the FDS lift belt	Examine the cable for damage. Make sure that the cable connects with the switch. Replace the switch.
The slack belt switch does not engage.	Examine the belt for a slack condition. Examine, replace the switch.

2.2.3 FDS Does Not Move UP in Manual Mode

The Elevator/FDS does not move up in Manual mode.	
The sensor for the "FDS Up" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor Examine, replace the sensor.
The drive control for the FDS does not operate correctly.	Make sure that the input and output voltages are correct. Examine the armature wires on the FDS motor.
There is a fault condition.	Correct the fault.
The VFD for the FDS lift drive does not operate correctly.	Make sure that the input and output voltages are correct. Examine, replace the fuses. Examine the armature wires on the lift motor.

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2.2.4 FDS Does Not Move Down in Manual Mode

The Elevator/FDS does not move down in Manual mode.	
The sensor for the "FDS Down" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor Examine, replace the sensor.
The FDS belt is in a slack condition.	Make sure that the tension on the belt is correct. Adjust the Belt Slack switch Examine the cable for damage. Make sure that the cable connects with the switch Examine, replace the belt slack switch.
There is a fault condition.	Correct the fault.
The VFD for the FDS lift drive does not operate correctly.	Make sure that the input and output voltages are correct. Examine, replace the fuses on the VFD. Examine the armature wires on the lift motor.

2.3 Top of the Load

2.3.1 FDS Does Not Wrap to the Top of the Load

The FDS does not wrap to the top of the load.	
The load height sensor does not operate correctly.	Examine, replace the sensor.
The sensor for the "FDS Up" is set too low.	Adjust the sensor.
The load height sensor is not set correctly.	Adjust the sensor.
The setting for the wrap height is incorrect.	Adjust the setting.
The settings for the wrap pattern/profile are not set correctly.	Adjust the "Overwrap" setting.

2.3.2 FDS Does Not Move the Correct Distance Above the Top of the Load

The FDS does not move the correct distance above the top of the load during the wrap cycle.	
The load height sensor does not operate correctly.	Examine, replace the sensor.
The load height sensor is not set correctly.	Adjust the sensor.

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2.3.3 FDS Does Not Stop at the Top of the Load

The Elevator/FDS does not stop at the top of the load.	
The load height sensor does not operate correctly.	Examine, replace the sensor.
The settings for the wrap pattern/profile are not set correctly.	Adjust the "Overwrap" setting.

2.3.4 FDS Moves Above the Load Height

The Elevator/FDS moves above the load height during the wrap cycle.	
The load height sensor does not operate correctly.	Examine, replace the sensor.
The load height sensor is not set correctly.	Adjust the sensor
The setting for the wrap height is incorrect.	Adjust the setting.

2.3.5 FDS Wraps Continuously at the Top of the Load

The FDS wraps continuously at the top of the load	
The sensor for the "Wrap Arm Home" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor. Examine, replace the sensor.

2.3.6 FDS Applies the Incorrect Number of Top, Bottom Wraps

The FDS applies the incorrect number of top, bottom wraps to the load.	
The sensor for the "Wrap Arm Home" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor. Examine, replace the sensor.

2.4 Bottom of the Load

2.4.1 FDS Does Not Wrap Low Enough on the Pallet

The FDS does not wrap low enough on the pallet.	
The sensor for the "FDS Down" is set too high.	Adjust the sensor.
The sensor for the "FDS Down" does not operate correctly.	Examine, replace the sensor
Pallet Grip is not set low enough.	Adjust the Pallet Grip.
The actuator, mechanical limits are not set correctly.	Adjust the settings.

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2.4.2 FDS Does Not Move Down during the Wrap Cycle

The Elevator/FDS does not move down during the wrap cycle	
The sensor for the FDS "Down" does not operate correctly.	Examine the cable for damage. Make sure that the cable connects with the sensor. Examine, replace the sensor.
The "Belt Slack" switch does not operate correctly.	Examine, replace the sensor.
The top wrap counter does not operate correctly.	Examine the input for the "Wrap Arm Home" sensor
The sensor for the "Wrap Arm Home" does not operate correctly.	Examine the input of the home sensor.
The VFD for the FDS Lift drive does not operate correctly.	Complete a test of the Up and Down functions in Manual mode.

2.4.3 FDS Does Not Move to the Bottom Position During the Wrap Cycle

The Elevator/FDS does not move to the bottom position during the wrap cycle.	
The sensor for the "FDS Down" is not set correctly.	Examine the cable for damage. Make sure that the cable connects to the sensor Adjust the sensor and the actuator

3.0 Wrap Arm

3.1 Wrap Arm does not Turn when you push the "Jog" Button

The wrap arm does not turn when you push the "Jog" button.	
The speed for the wrap arm is set too low.	Adjust the speed.
The tension on the drive belt for the wrap arm is not set correctly.	Adjust the tension.
The Wrap Arm drive does not operate correctly	Make sure that the pulley for the wrap arm turns.
A component is not in the home position.	Move all components to the home position.
There is a fault condition.	Correct the fault.

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4.0 Automation Unit

4.1 Clamp Does Not Hold the Film at the Start of the Wrap Cycle

The clamp does not hold the film at the start of the wrap cycle.	
There is low air pressure in the bladders.	Adjust the pressure to 0.7 – 1.0 Bar (10 – 15 lb). Look for air leaks.
The clamp does not make contact with the side of the load when the arm pivots.	Adjust the position of the load. Make sure that the load is in position to let the head of the clamp touch the load.
The speed of the wrap arm increases too quickly.	Adjust the acceleration of the wrap arm.

4.2 Clamp Does Not Hold the Film at the End of the Wrap Cycle

The clamp does not hold the film at the end of the wrap cycle.	
The sensor for the “clamp retract” does not operate correctly.	Examine the cable for damage. Make sure that it connects with the sensor. Adjust, replace the sensor.
There is a fault condition.	Correct the fault.
There is an air leak.	Repair the leak.
The film does not make contact with the clamp when the wipe arm extends.	Adjust the film plow and the wipe arm.
The film plow does not align with the clamp.	Adjust the plow and the clamp.
There is low air pressure in the bladders.	Adjust the pressure to 0.7 – 1.0 Bar (10 – 15 lb) Look for air leaks.

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4.3 Wipe Arm Does Not Extend at the End of the Wrap Cycle

The wipe arm does not extend at the end of the wrap cycle.	
There is an air leak.	Examine, repair the air leaks.
There is low air pressure.	Make sure that the air pressure switch at the pneumatic assembly is set to 3.8 Bar (55 PSI). Examine optional equipment for pneumatic requirements that can cause the air pressure switch to engage. Examine the air pressure gauge at the pneumatic assembly. The standard requirement is 142 lpm @ 6 Bar (5 CFM @ 80 Psi).
The pneumatic valve does not operate correctly.	Use the "Override" button on the valve to do a test of the valve. You can also examine the function in Manual mode.
The sensor for the "Wipe Arm Extend" does not operate correctly.	Examine, replace the sensor.
There is a fault condition.	Correct the fault.
The Wrap Arm is not in the home position.	Move the wrap arm to the home position.

4.4 Film Does Not Cut at the End of the Wrap Cycle

The film does not cut at the end of the wrap cycle.	
The Cutter wire is not set correctly.	Adjust the wire.
The Cutter wire on the cutter head breaks.	Replace the wire.
The fuse in the cutter wire circuit is defective.	Refer to the electrical drawings and replace the fuse.
The Cut and Wipe assembly does not fully extend. If it does not extend, the cutter wire does not energize.	Adjust the sensor for the "Cut and Wipe Extend". Make sure that the load is not too close to the Cutter Arm.
There is adhesive from the film on the wire.	Clean, replace the wire.
The circuit breaker for the cutter wire is not set.	Refer to the electrical drawings and set the circuit.

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4.5 Clamp Does Not Move to the Full Vertical Position

The clamp does not move to the full vertical position when it retracts.	
The head of the clamp “sticks”, or there is a break in the torsion spring.	Replace or repair/adjust. Refer to the clamp assembly drawing.

4.6 Arm Moves to the Retracted Position too Quickly

The arm moves to the “retracted” position too quickly.	
The flow control for the air cylinder on the film clamp is set too high.	Adjust the flow control on the "Retract" air cylinder. Make sure that it moves smoothly.

4.7 Clamp Cannot Retract from the Load

The clamp cannot retract from the load.	
The film is below the pivot point of the clamp head.	Adjust the “Lower Travel” limit switch. Make sure that the bottom edge of the film is above the pivot point.

4.8 Head of the Clamp Sticks Below the Film at the Load

The head of the clamp “sticks” below the film at the load.	
The film covers more than 50% of the wheel on the clamp head.	Adjust the FDS “Lower Travel” sensor. Make sure that the bottom edge of the film covers less than 50%.

5.0 Pallet Grip

5.1 Cable Did Not Form Correctly

The cable of film did not form correctly.	
The FDS does not move down far enough to engage the Pallet Grip.	Lower the sensor for the "FDS Down”.
The groove roller is set too low for the height of the pallet.	Adjust the height of the groove roller. Make sure that the film cable wraps the top 25 – 38 mm (1”-1 ½”) of the pallet.
The tilting roller is not set correctly to make the cable of film.	Lower the FDS to fully engage the roller.

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5.2 Cable Does Not Catch the 4 Corners of the Pallet

The film cable does not catch the 4 corners of the pallet.	
The FDS does not move down far enough to wrap the pallet.	Lower the sensor for the "FDS Down".
The groove roller is set too high for the height of the pallet	Adjust the height of the groove roller. Make sure that the film cable wraps the top 25 – 38 mm (1"-1 ½") of the pallet.

6.0 Conveyors

6.1 Section of Conveyor Does Not Move in the Manual Mode

A section of conveyor does not move in the Manual mode.	
There is a motor "overload" condition.	Reset the "Overload".
The fuse in the motor control circuit is defective.	Replace the fuse.
There is damage to the drive chain.	Examine, replace the chain.
The conveyor drive does not operate correctly.	Examine the motor armature wires. Examine, replace the conveyor drive reducer.
There is a fault condition.	Correct the fault.
A component is not in the home position.	Move all components to the home position.
The safety gates are not in the "up" position.	If the conveyor section is the first infeed or exit section adjacent to the wrap zone: Raise the gate before you "jog" the conveyor in manual mode.

6.2 Wrap Arm Conveyor Does Not Move in the Manual Mode

The Wrap Arm conveyor does not move in the Manual mode.	
There is a motor "overload" condition.	Reset the "Overload".
The fuse in the motor control circuit is defective.	Replace the fuse.
There is damage to the drive chain.	Examine, replace the chain.
The conveyor drive does not operate correctly.	Examine the motor armature wires. Examine, replace the conveyor drive reducer.
There is a fault condition.	Correct the fault.
The safety gates are not in the "up" position. (S2500/3500, S4000, SLA, SLC)	If the conveyor section is the first infeed or exit section adjacent to the wrap zone: Raise the gate before you "jog" the conveyor in manual mode.

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6.3 Load Does Not Move to the Staging Conveyor

The load does not move to the staging conveyor.	
There is a motor “overload” condition.	Reset the “Overload”.
There is damage to the drive chain.	Examine, replace the chain.
The conveyor drive does not operate correctly.	Examine the motor armature wires. Examine, replace the reducer for the conveyor drive.
The “Staging” photoelectric sensor is not set correctly.	Adjust the sensor
The “Staging” sensor does not operate correctly	Examine the cable for damage. Make sure that the cable connects with the sensor. Examine, replace the sensor.
The fuse in the motor control circuit is defective.	Replace the fuse.
There is a fault condition.	Correct the fault.
The infeed or exit safety gate is in the down position.	If the conveyor section is the first infeed or exit section adjacent to the wrap zone: Raise the gate before you “jog” the conveyor in manual mode. Adjust the sensor that raises the safety gate.