CLINCH SOLUTIONS

Troubleshooting for System

Issue	Cause	Solution
System will not Power up (No Lights).	Main Disconnect turned off. No Power to the machine. DC Power Supply failure.	Turn Main Disconnect to the on position. Check Main Fuses. Check DC Power Supply, replace if faulty.
The system will not start (On light is lit).	Off button is “open”. On button is not closing. Main Control Relay system failure.	Check button, replace if faulty. Check button, replace if faulty. Check for loose wires. Check the wiring continuity and replace if faulty.
Low Air pressure Alarm	Check to see if the air is hooked up to the system. Check to see if the regulator is closed. Check to see if the gauge shows 80-100 PSI.	Hook air supply up to the system. Open the shut-off Valve on top of the Filter / Regulator combo. Change regulator valve (Thumb knob) to correct reading.
Shot Tube Not Connected Alarm.	Connectors on the Shot Tube are not fully connected.	Make sure all connections are secure and connected correctly. Check that the side sensor is lit-up.

Issue	**Cause**	**Solution**
Nut Jammed on Feed Belt Alarm	Nut under Feed Belt Nut gets jammed in the track	Remove all nuts around the Belt. Take the track cover off and use screwdriver in the slots to slide jammed nuts down the track.
Nut Jammed or stuck in the Shot-Tube	Shot-Tube Pinched or kinked	Replace Shot-tube.
High Air pressure Alarm	Pressure Regulator set incorrectly	Change regulator valve (Thumb knob) to correct reading. 80-100 PSI.
Track Empty Alarm	Nuts are not reaching fastener distribution block	Clear track of all obstructions.

Troubleshooting for Heads

Issue	Cause	Solution
Low Holding Force- Fastener not seated	Punch and anvil faces are not parallel with each other. Strip cocked during installation.	Ensure that the punch and anvil are flat and parallel to each other. Ensure that the lifters and strippers are holding the stirp perpendicular to the Clinch Fastener Unit.
Poor Holding Force – Fasteners Fall out of Part.	Inadequate installation force. Part material is too hard for fastener material. Burr in hole in strip. Oversized Pre-Pierce Hole. Piercing Operations may locally harden the strip. Die side of the strip may have an oversize hole due to the shear & break of the pierce hole.	Apply more force (nitrogen pressure) or changing the anvil timing. Specify appropriate fastener/ material for part hardness Sharpen Die. Do not countersink or deburr hole. Properly size mounting hole. Sharpen Die and/or add lubrication station to cool Pierce operation. Close the clearance up between the Punch and die section. Also change them simultaneously.
Poor Holding Force of Fastener Near Bend in Strip.	Sheet was bent after fastener was installed. This may have caused distortion of the material around the pierced hole. Hole is punched prior to bend and hole has become elongated.	Bending should be done prior to installation. Punch hole after bending the strip.

Issue	**Cause**	**Solution**
Poor Holding Force of Rivet or Studs in Panel.	Hole in anvil too large or chamfered.	Use anvil with larger hole per sign-off drawings.
Fastener Off-Center of hole.	Oversize mounting hole. Fastener is cocked in hole and shears side of hole when inserted.	Punch hole to specified dimension on sign-off. Check that shank of fastner is being held squarely in Clinch Head before Inserting.
Threads Tight – Part Buckles.	Fastener over-squeezed.	Reduce installation force.
Tight threads, cracked.	Shank length extends through sheet.	Choose fastener with proper shank length for part thickness.
Fastener does not fit into hole. Fastener deforms or shears during installation. Sheet metal may extrude into installation tooling causing tool to stick or not work properly.	Undersized mounting hole.	Change Pre-pierce size of mounting hole.
Part buckles badly with Stud or Rivet Fastener Installed	Lack of countersink in anvil.	Provide countersink in anvil to specified dimensions.
Head of flush-head stud or standoff cups.	Punch diameter too small or not hard and flat.	Punch must be larger than head of stud or standoff and preferable equal to anvil diameter.
Edge of panel bulges.	Mounting hole impedes specified minimum edge distance. Nut is over-squeezed.	Move mounting hole away from edge. Reduce installation force if possible.