

# Trouble Shooting Guide to Automatic or Manual Drawbar

## Motor does not run:

- 1) Is main air supply to machine turned on and at least 90 PSI?
- 2) Is air regulator set to at least 80 PSI?
- 3) Is dial on motor set to (8) all the way open? Turn C.C.W. to open.
- 4) If you think the air motor is oil locked do the following. A) Disconnect air supply. B) One at a time, remove air hose's, blow out & replace. Make sure hose's are pushed securely back into fittings. C) Disassemble upper control block (on automatic only) and remove excess oil and re assemble. D) Run motor manually by depressing buttons on motor or using butterfly. E) Re connect the air supply and turn on air. F) Adjust the Lubricator for minimum oil flow. You should just be able to see a drop forming during operation, to allow 1 drop per 5-10 cycles. 1 cycle is equal to 1 in and 1 out.
- 5) Did you remember to push in on the green safety button on side of switch?
- 6) On manual model did the butterfly skip past the roll pin?

## Motor turns but nothing Happens to Drawbar:

- 1) Is spindle all the way up and in the locked position or at machine home?
- 2) Has socket fallen off end of motor?
- 3) Are splines broken or stripped from end of Drawbar?

## Drawbar turns but tool Does not tighten proper:

- 1) Does air supply to motor stay above 80PSI while making tool change.
- 2) Do you have a washer between Drawbar and spindle and is it well greased at washer and on Drawbar threads. This is very important due to friction reducing clamping forces.
- 3) Is sheer pin in Drawbar broken or missing?
- 4) Are threads in Collet or on Drawbar stripped?
- 5) Are you holding Arm or Push Buttons in for three seconds after tool seats?
- 6) With soapy water check airlines for leaks. Sometimes an airline will get pinched and a small hole will be cut in airline. Be sure airline and fittings are checked.

## Motor runs all the time

- 1) Airline from FRL is connected to wrong fitting on Automatic Drawbar.
- 2) Butterfly has skipped past roll pin on arm. Manual Drawbar only.
- 3) Sometimes one of the plungers in motor will stick in the in position.

## Tool seems to be stuck In spindle:

- 1) Make sure threads and washer have grease on them.
- 2) Have you got .050 to .100 space between Drawbar and motor mounting plate?
- 3) Check air pressure to machine. 90 PSI min. into FRL and 80 PSI min. out FRL.
- 4) On Automatic the Upper Control block may need to be cleaned. Turn off air supply and remove from motor. Clean thoroughly and replace. Note: Stud on piston goes to motor. O-rings are made of 50 Buna if you need to replace them.
- 5) Motor over or under oiled could also cause tool to stick as motor loses power.
- 6) On Automatic model try reversing the airline into IN/OUT ports to see if it makes any difference. If it does a O-ring may have been cut or a chip may have gotten into the IN/OUT block. A disassemble and cleaning of IN/OUT block may be necessary.

## Miscellaneous information:

- 1) If Drawbar rod does not fit thru top of your machine it may need to be turned to .875 Dia. On some machines the 1.060 Dia. Is too large.
- 2) Always use a synthetic air tool oil in FRL.
- 3) Always have pin in spindle on R8 Collet machines to keep Collet from turning.
- 4) General maintenance once a month should include greasing threads on Drawbar and area where washer rests. Make sure FRL is working properly with 1-2 drops every 5 to 10 cycles. One cycle is in and out once. Also check to make sure no screws have vibrated loose. If any have retighten as needed.