

COVENTRY DX DIE HEADS STRIPPING, ASSEMBLING, REPAIRS

For parts identification please refer to the spare parts list.



DX DIE HEAD

Ensure the head is in the open position.
Remove and retain any chaser dies.
Remove front plate.

When disassembling care should be taken to retain all small parts, screws, springs etc. These should be placed in a secure container for inspection and reuse if serviceable.



Remove retaining plate.

Remove Auto die closer.



When lifting off retaining plate you should see two outer cushion springs which will become free, note their locations. If instead of springs you find hard rubber pieces these should be replaced by springs. See parts list item 13/14

Note also the position of the detent pin as it connects to the plunger sub assembly. The two inner springs are drawout springs.

The plunger sub assembly consists of a knurled adjusting screw and locknut, a spring, and the plunger. This does not need to be disassembled unless damaged.





The shank can now be lifted from the back plate.
Remove the detent pin and retain.
Note that the shank has four projections with holes.
One of these is much thinner than the others.
Note its position with respect to the detent pin.

Remove the back plate screws.
The die head body (the part that holds the chasers) will now be free so could fall from the front of the assembly and be damaged.
Take care to prevent this.



Remove the back plate.

Remove the opening springs. These have just one opening spring pad in the end farthest from the detent pin bush position.



From the external scroll, remove the adjusting screws and tooth.
The opening spring screws may be removed for inspection.

Remove the body, if still in situ.



The internal scroll will still be located in the external scroll.

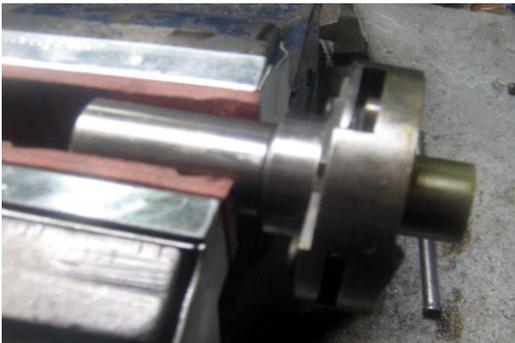
There is no need to remove the internal scroll unless both scroll screws are missing. In this case the two scrolls need to be aligned.

To facilitate this a number is marked on the forward face of each scroll. The numbers should be the same. Line up the numbers and replace the scroll screws.

The die head is now disassembled. All major parts should be checked for damage especially at mating surfaces, and any burrs or blemishes removed. All minor parts, springs, screws etc should be checked and replaced if required. The tooth and detent pin should be checked for signs of wear at their mating edges. If these are not full and square they should be replaced.

All parts to be reassembled must be thoroughly cleaned and any swarf, chips etc removed. All parts should be greased and a thin oil applied to moving parts.

Refit the tooth into the external scroll, centrally in its slot. Replace the adjusting screws so that they just hold the tooth.



With the shank held, fit the backplate onto it with the detent pin bush uppermost. The thinner projection of the shank should be 180 degrees from the bush, i.e. downwards. In this position the die head will operate both in pull off and push off modes.

If the thinner projection is placed over the detent pin bush the die head will only open in push off mode.

Reassemble the body to the external scroll.

Detent pin bush in back plate must be opposite gap in tooth.

Ensure that the opening springs are proud from the back plate, at the spring pad end.

This facilitates relocation of the opening spring screws. Offer the external scroll up to the back plate ensuring that the opening spring screws locate into the gap at the opening spring pads. Gently push forward and turn the external scroll until the screws locate, and the parts fully mate together.





Position die head so that body cannot detach, remove shank and fit backplate screws and springs.

Place detent pin into bush with slot facing outwards.

Reposition shank ensuring that thick projection is over detent pin to ensure pull off and plunger push off modes.



Locate cushion springs into shank.

Refit retaining plate / plunger assembly.

Ensure that the plunger locates into the slot of the detent pin, and that the cushion springs are square between the shank and retaining plate.



Refit and tighten retaining plate screws.

Refit auto die closer

Refit chasers and front plate.

Test head in vice for both pull off and push off actions.