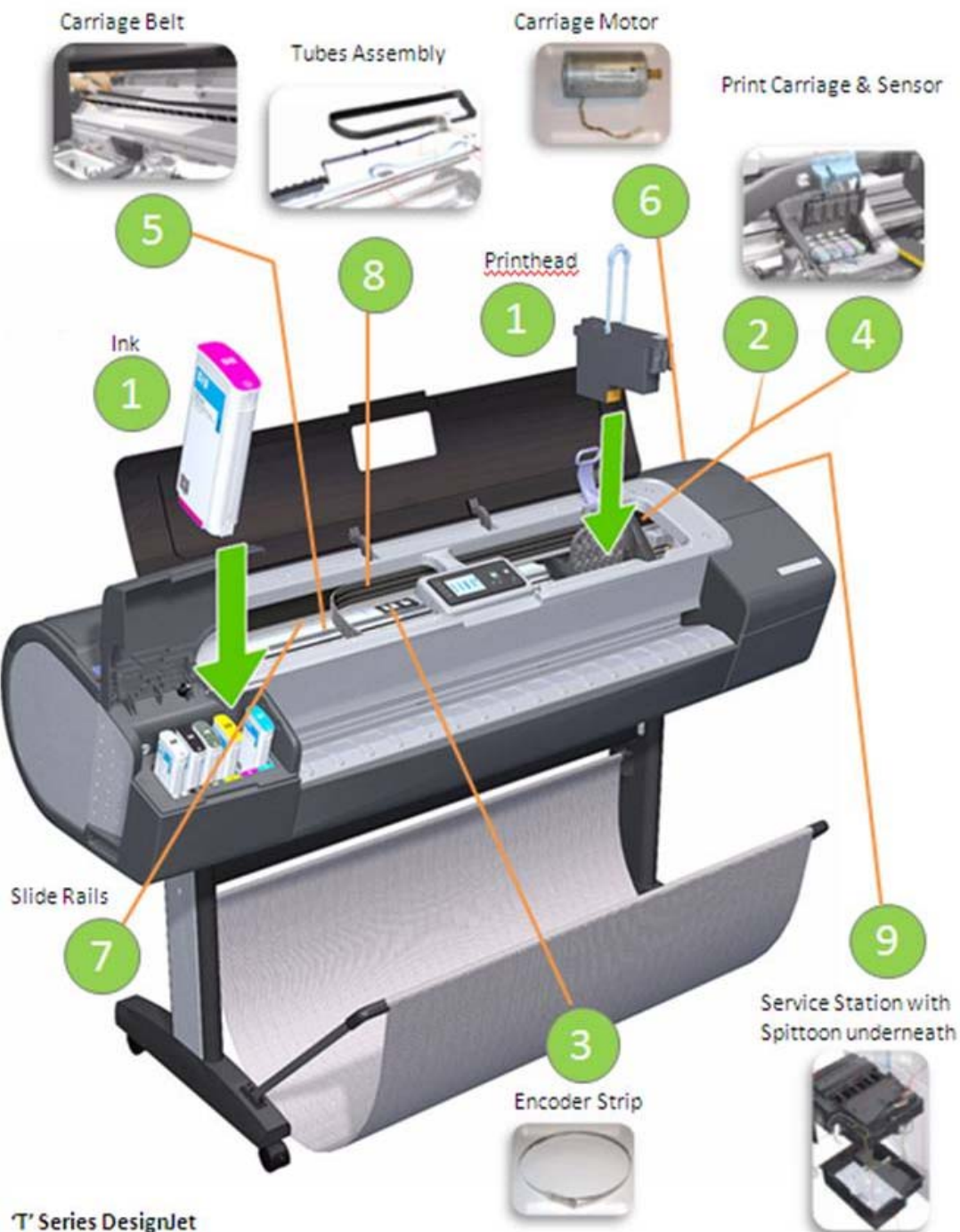


Why looking after your DesignJet *now* will pay dividends later...

Servicing a DesignJet is an outlay that some companies embrace – while others wait until a complete cessation of machine life (which normally occurs at the most inconvenient time) until they call out an engineer. Regular servicing however, can double the life of all DesignJet parts as follows:



1. **Printheads** have 200 microscopic nozzles firing **ink** droplets so fine that it forms an aerosol mist. Some of this ink mist is suspended above the paper and with each carriage pass is pulled into the finer workings of the DesignJet, depositing a thin layer of ink throughout.
2. **Print Carriage** contamination provides positional errors (leading to banding, missing, jagged lines, missing characters and distortion of the drawing). Wear over time will also result in **printheads** not seating correctly.
3. **Encoder Strip and Encoder Sensor** contamination provides positional errors (also leading to banding, missing, jagged lines, missing characters and distortion of the drawing).
4. **Optical Sensor** contamination leads to upsetting the colour balance and causing paper edge detection problems.
5. **Carriage Belt** contamination leads to increased friction in the print carriage bearings and causes the belt to fragment and eventually snap. Belt replacement requires a full strip-down of the DesignJet.
6. **Carriage Motor** this part incurs further stress when the slide rails are contaminated with fragments of belt and paper dust, which in turn impacts its lifespan.
7. **Slide Rail** contamination from ink spray, paper dust and carriage belt fragments leads to increased friction on the Y axis, impacting the lifespan of the Carriage Motor. This slide rail needs regular lubrication.
8. **Tubes Assembly** are a maintenance kit item which carry the ink to the print heads. They suffer from stress fractures due to the constant bending with each carriage movement pass. Such fractures can be picked up during a service visit. If undetected, high pressure ink will be sprayed inside the internal workings of the machine - requiring a full engineering strip-down (best case scenario) or replacement electronics module and other contaminated parts (worst case scenario).
9. **Service Station** acts as a **Spittoon** area (it cleans off the **printheads** and acts as a cap to prevent the **printheads** from drying out). After a while the spittoons become contaminated and ink will begin to overflow, often dripping down the right hand side of the machine onto the floor/carpet. These stains are difficult to remove.