ALLEN DATAGRAPH

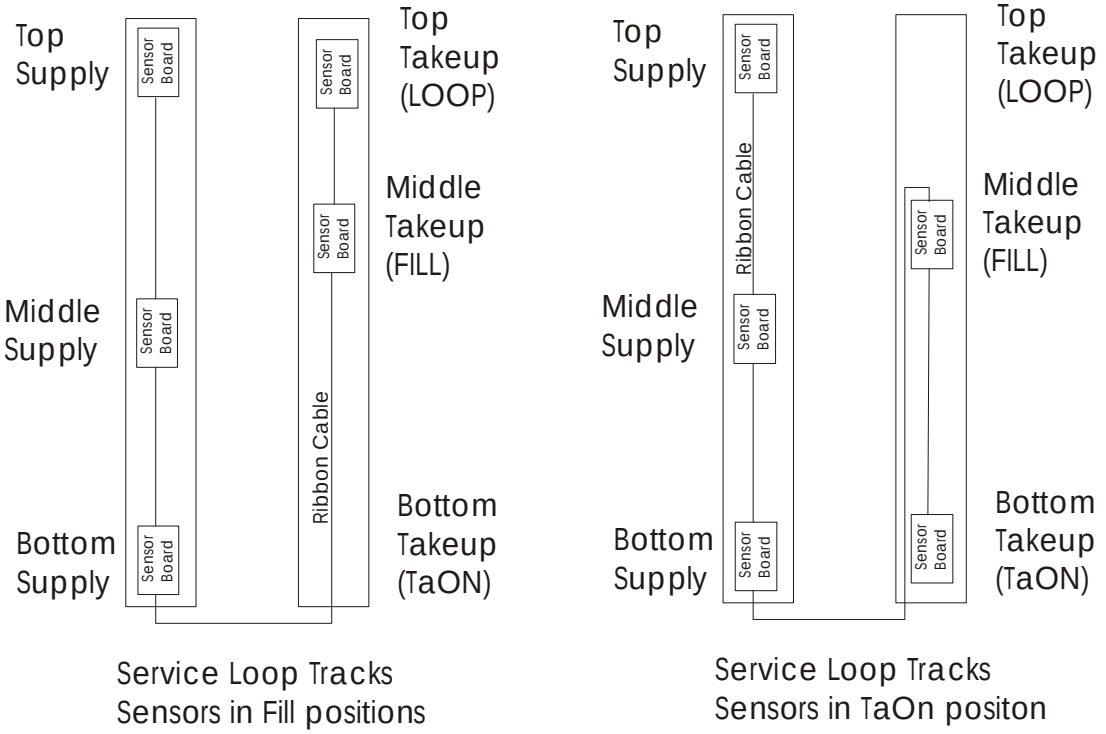
Technical Support Bulletin:
5 Sensors on DFS (new modes)

Technical Support Bulletin (Last update 1-7-5)

Abstract: In December 2004 Allen Datagraph released version 3.41 DFS firmware that supports 5 service loop sensors instead of only 3 service loop sensors. DFS machines made prior to 2004 can upgrade to build 41 or later but have to turn off the take up service loop sensors with diagnostic 55. This document also describes the new modes available for 5 sensor DFS machines.

To run diagnostic 55 to change the service loop mode: press select on the front panel of the DFS. Use the right/left buttons to select dia. Then press the down arrow button to select 0055 on the display. Then press select. Use the up/down buttons to select None for no take up loop sensors. Then press select to exit the diagnostics. Turn the power on and off.

Service Loop Sensor Locations (FILL and TaON modes)



There are 5 sensors on DFS machines built after Dec 2004. The new machines are shipped with the last sensor on the ribbon cable installed in the top position on the take-up side.

FILL Mode
This mode makes the last sensor in the chain the LOOP sensor (See left hand diagram). Use diagnostic 55 to select FILL mode. If the take-up sensor hits the LOOP position the machine is stopped with the word LOOP in this display indicated the service loop on the take-up side is too small and the software cannot recover. This error requires operator intervention. Turn the DFS off and reload the material to recover from this error. The 4th sensor in the chain is the FILL sensor. If the software sees the FILL sensor the DFS is paused and a FILL operation is performed to put more material in the loop. After the fill operation is complete the DFS is resumed.

TaON Mode:
This mode makes the last sensor in the chain the TaON sensor (See right hand diagram). Use diagnostic 55 to select TaON mode. While the TaON sensor is detected the Takeup stepper motors are on. If the software sees the FILL sensor the DFS is paused and a FILL operation is performed to put more material in the loop. After the fill operation is complete the DFS is resumed.

The mode selected with diagnostic 55 must match the location of where the sensors are installed. That means if you want to change the mode you must take the cover off the take up service loop sensor rail and move the last board in the chain to either the LOOP or TaON position. Then run diagnostic 55 to let the DFS software know where the last sensor is installed.