

Advisory Bulletin

Subject	Carriage drive belt tensioning procedure
Purpose	Explains the procedure for adjusting the carriage drive belt tension
Applies to	All EFI-VUTEK printers, all serial numbers
Priority	2: Recommended. Improves reliability or functionality
Number	VAB-00137 Rev B
Date	November 2007

Summary

Tensioning of the carriage drive belt is critical to the proper operation of the printer. A belt which is adjusted too tight can cause premature wear on the belt, pulleys, motor mounts, and bearings, and may cause excessive vibration throughout the printer. If the belt is too loose, it can actually jump a tooth on the pulley. Taking the time to properly adjust the carriage drive belt tension will increase the belt life while improving the overall print quality.

Required tools:

- Wagner FDK20 Push-Pull Force Gauge
- 10 MM open end/box wrench
- Allen Wrench set



Wagner model FDK 20 push-pull force gauge

**10 mm open
end/box wrench**

**Allen wrench
set**



Procedure

Before you start

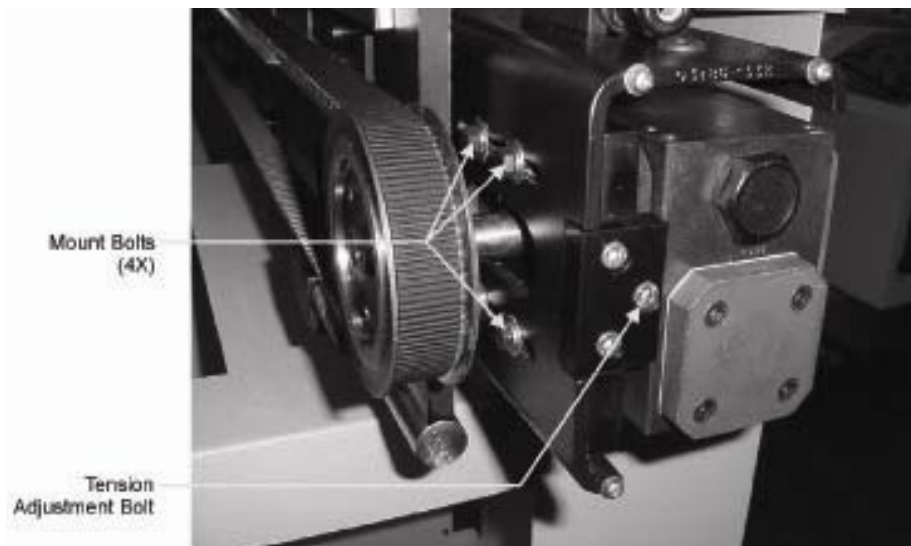


Please review this document and all its steps *before* beginning.

To properly tension the carriage drive belt, perform the following steps:

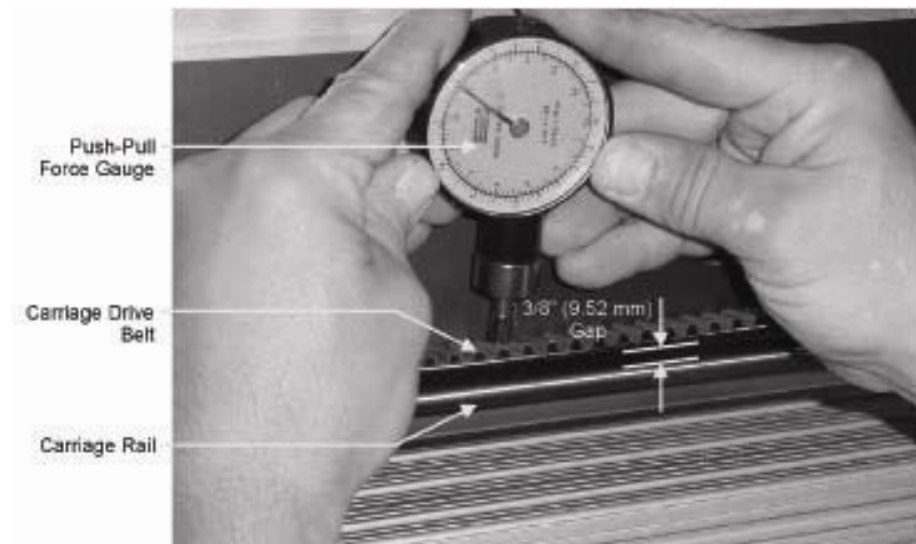


- 1 Perform the lockout/tagout procedure.
- 2 Manually position the carriage against the left end of the printer (Home position).
- 3 Remove the carriage drive motor safety cover or end panels on UV printers. This process will be different for each model printer.
- 4 Loosen the four mounting bolts with the 10 mm wrench. These four bolts secure the drive motor assembly to the carriage rail frame.

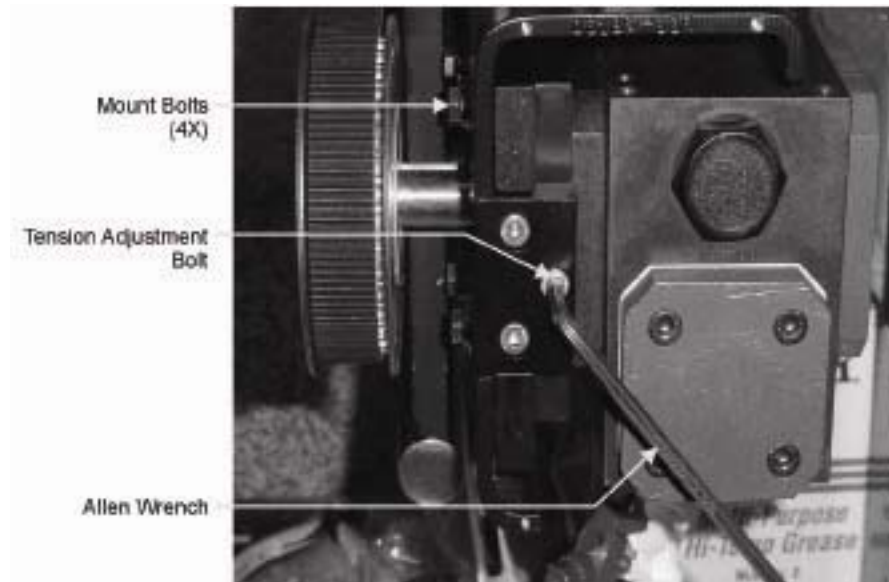


- 5 Locate the approximate center of the carriage drive belt and position the push-pull force gauge on the lower inside edge of the carriage drive belt.

- 6 Place the push-pull force gauge in the center of the belt to obtain an accurate reading.
- 7 Push down on the push-pull force gauge until the underside of the drive belt is approximately $\frac{3}{8}$ " (9.52 mm) above the carriage rail. Note the indicated pounds reading on the push-pull force gauge.



- 8 Adjust the belt tension so that the push-pull force gauge indicates the correct value for your printer model. Reference the values in table 1 for the correct value.
 - If the tension is too high, turn the tension adjustment bolt in a counter-clockwise direction in $\frac{1}{4}$ -turn increments.
 - If the tension is too low, turn the tension adjustment bolt in a clockwise direction in $\frac{1}{4}$ -turn increments.



- 9 Repeat the above steps until you attain the correct tension reading on the push-pull force gauge.
- 10 Tighten the drive motor mounting bolts.
 - Hold the drive motor assembly as level as possible when tightening the four mounting bolts.
- 11 Turn the printer on and cycle the carriage from one end of the printer to the other two or three times. Place the carriage in the home position and verify that the belt tension is set correctly.

150	3.5 lbs
2600	3.5 lbs
x360, FabriVu, Fusion	3.5 lbs
UV180	4.5 lbs
PV200	4.5 lbs
PV320	4.5 lbs
QS2000 – QS3200	4.5 lbs
QS3200r	4.5 lbs

Table 1