VLF Trendsetter
Head Guards Upgrade Procedure

1. SCOPE

This document describes the steps for the TSV table head guards upgrade in the field and should be used together with the retrofit kit 05-2041(5080/5880). Related ECOs: E345, E679and E797.

Important: The 5080 and 5880 table upgrade requires 4 extra counterweight brackets 57-7289A to properly balance the table when maximum size plates are being used (see Step 8 of the procedure below). The table should stay in the "up" position ("table idle" mode) with the heaviest plate possible.

2. TOOLS

Allen keys (2.5mm, 3mm and 5mm), Loctite 242. For TSV serial # B328 and lower # there is additional requirement for high-speed drill (**no cordless too weak**), drill bits (3mm, 5mm) and M6 tap.

3. PROCEDURE

1. Remove five M5x10 button head screws 52-4278 (see Fig.1) and separate extension support bar 57-1486B from extension support 57-1485B (see Fig.2).



Fig.1 Location of button head screws

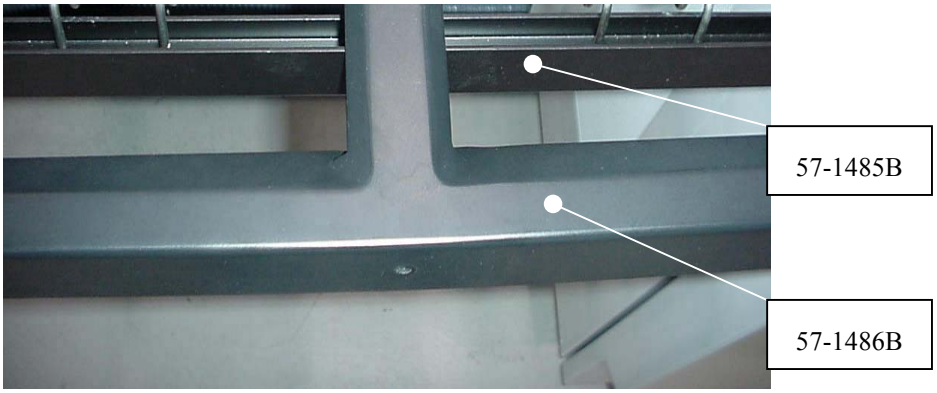


Fig.2: Location of extension support bars

2. Remove extension center guides 57-1488A as shown in Fig.3 and Fig.4.

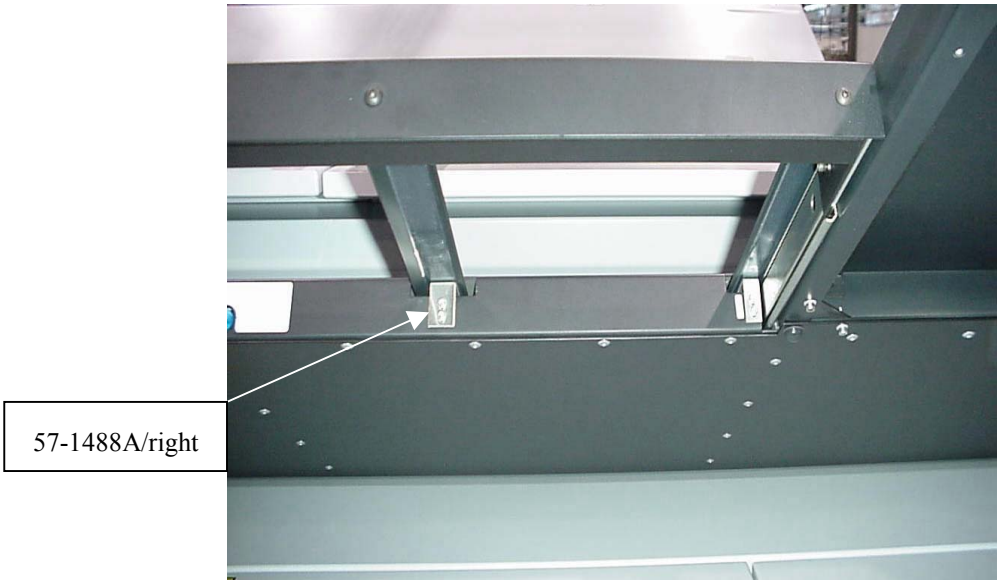


Fig.3 Location of extension center guide (right side)



Fig.4 Location of extension center guide (left side)

3. Install new brackets 57-8878A (marked LHS, for left-hand side) and 57-9065A (marked RHS, for right-hand side) in place of the removed extension center guides, as shown in Fig.5 and Fig.6.



Fig.5: New brackets installed in place of center guides

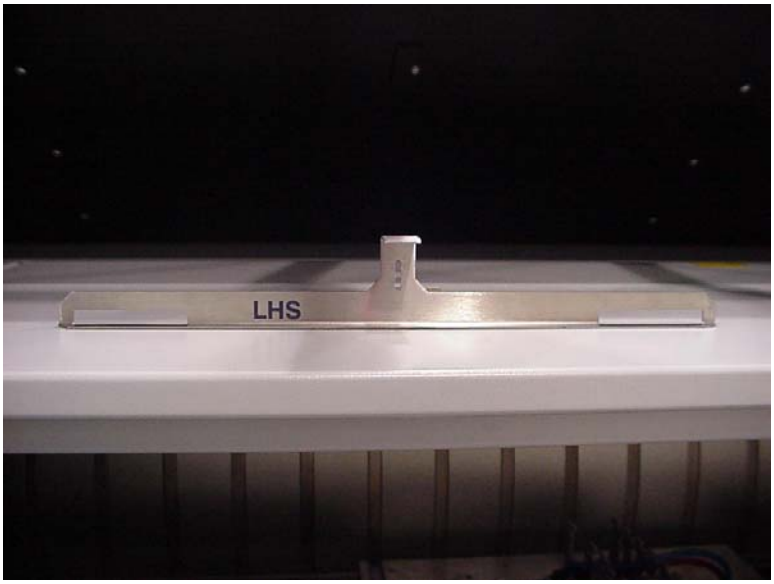


Fig.6: Left side bracket

4. Install grommets 59-3403 onto the left and right head guard hooks as per Fig.7. The grommets are intended to reduce the rattle of head guards during normal machine operation.



Fig.7: Location of grommets on head guard hooks

5. Install head guards 57-8879A (right) and 57-9066A (left) by sliding them into the slots in brackets 57-8878A and 57-9065A. Place the head guard hooks in the extension support. See Fig.8, 9, and10.

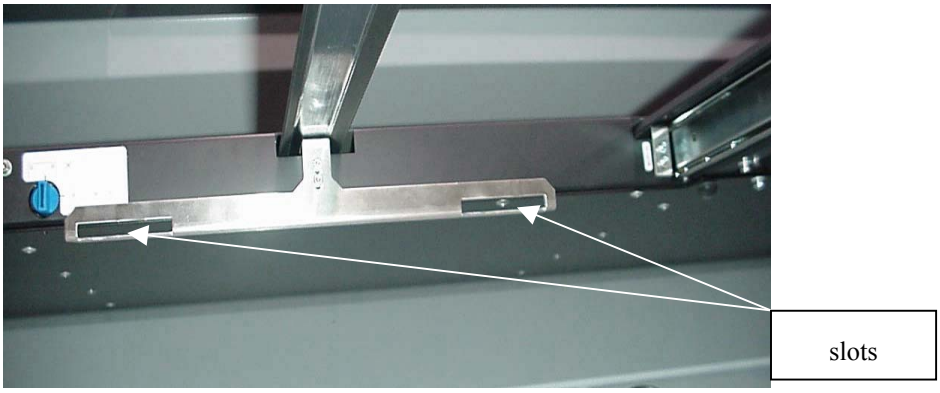


Fig.8: Location of slots in bracket



Fig.9: Head guard placed into slots in bracket



Fig.10: Hooks on head guard placed into extension support

6. Reassemble the extension support bar and its support. Make sure that the head guard hooks and the grommets are caught in between the support and the bar. See Fig.11.



Fig.11: Extension support bar and support assembled

7. Replace the M5x10 button head screws in the extension support. The assembled table head guards should look as in Fig.12.

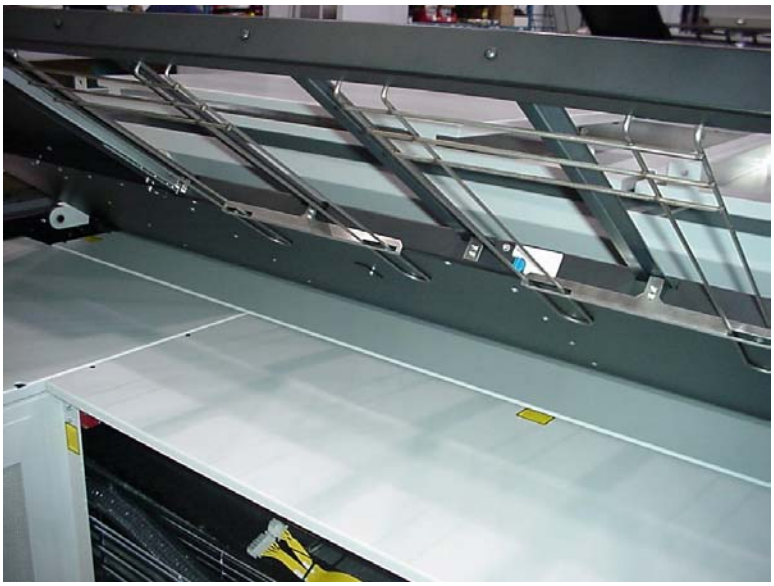


Fig.12: Head guard assembly completed

8. Attach 4 (four) counterweight brackets 57-7289A to the 5080 or 5880 table counterweight using two M6x65 screws 52-3246 and M6 Belleville washers 52-4247, as shown in Fig.13 and Fig 14.



Fig.13: Four brackets installed on counterweight 5080

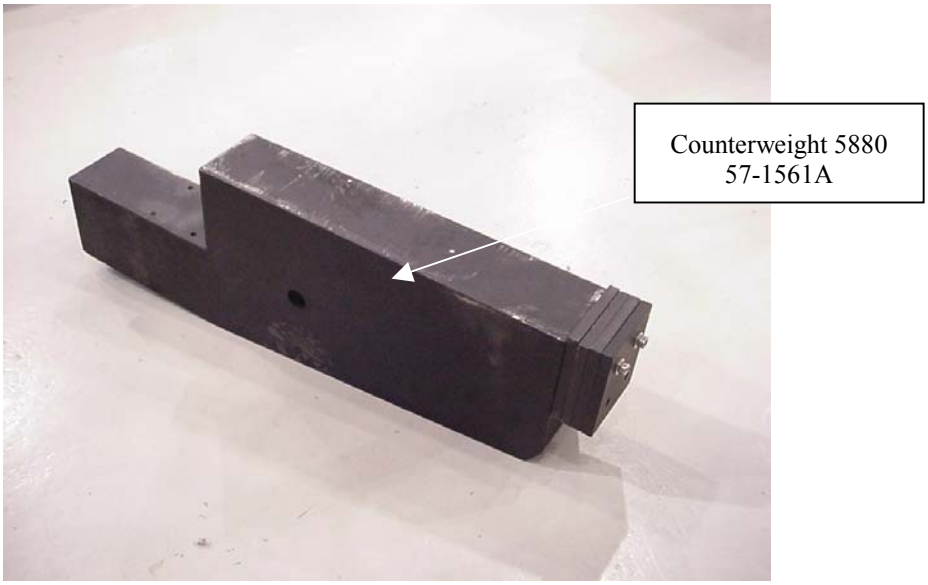
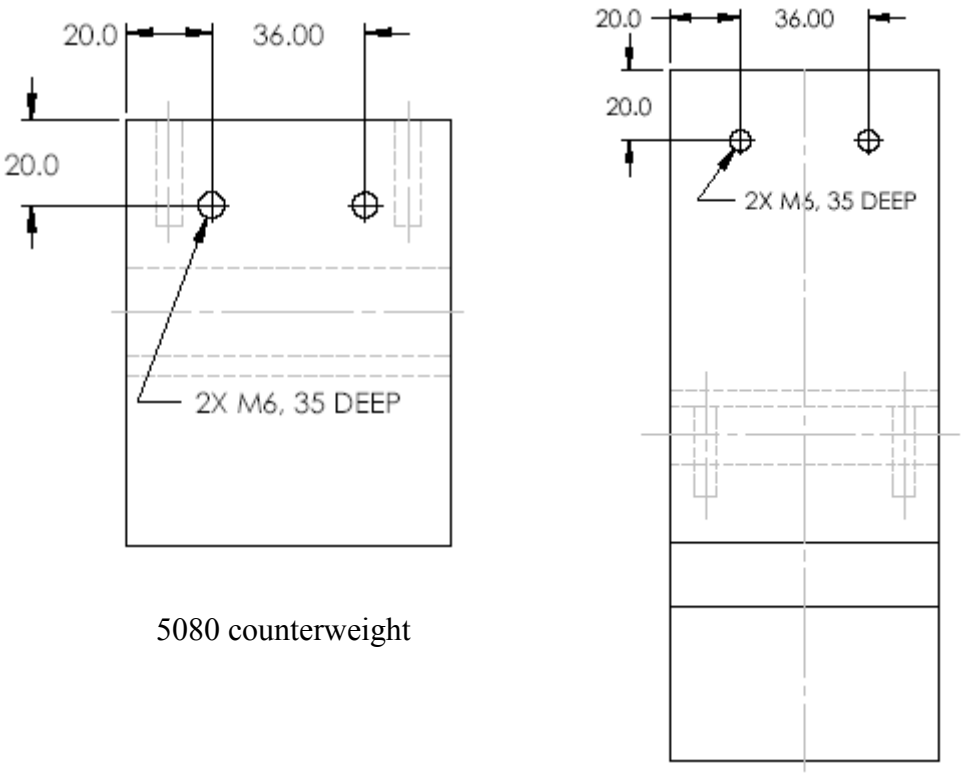


Fig.14: Four brackets installed on counterweight 5880

Note: The counterweights on machines below serial #B328 may not have M6 holes to mount the extra brackets. The service engineer then has 3 options:

- Leave the counterweight as is, if the table is balanced enough without the brackets.
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- Rework the counterweight (drilling and tapping as shown in Figs.15-17).



5080 counterweight

5880 counterweight

Fig.15: Location of M6 holes to mount the extra brackets

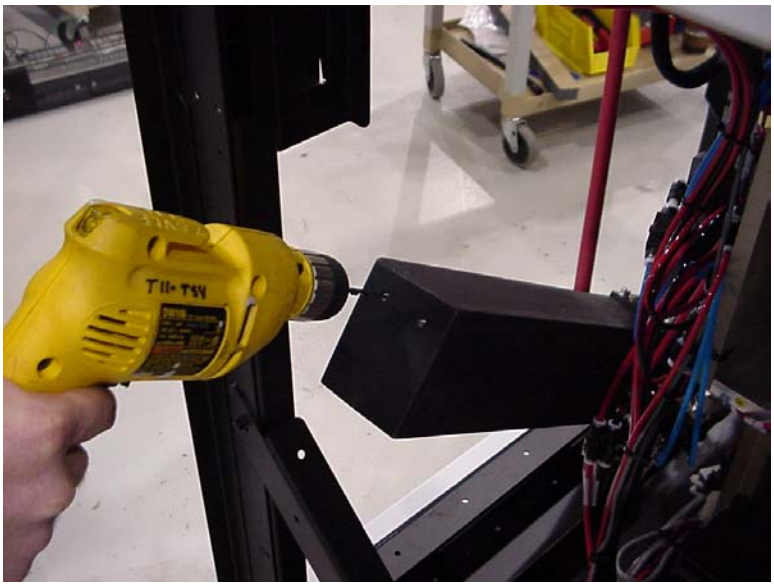


Fig.16: Drilling the bracket mounting holes

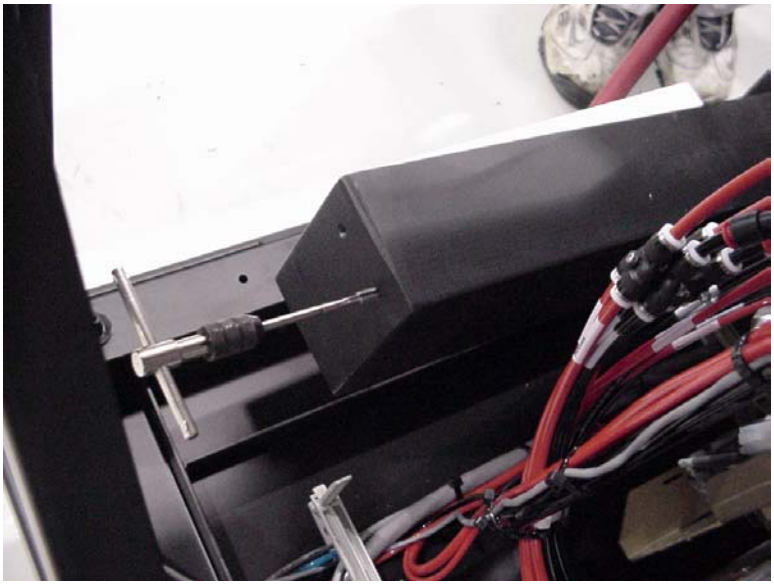


Fig.17: Tapping the bracket mounting holes