Conversion Instruction for Supplementary
Installation of the MINIMUM DEPTH REDUCTION

(See also circuit diagram 21525 940...)

A) Checking the PC board VSA 80

Please check the PC board VSA 80 which is inserted in the equipment carrier in the socket of the cutting lathe. If you find the number 94002 or higher printed before the 3 characters equipment number then this card has not to be exchanged.

Should there however the number 94001 be printed on the card, so this card has to be substituted through another card which has to be supplied and contains the latest circuit. Before inserting the new card the conductive protecting rails have to be removed from the pin connector. Please put these protecting rails immediately on to the pin connector of the exchanged cards and put these into the conductive black protecting enveloppe within which you received the new card.

B) Soldering work

The soldering work now described can easily be executed by yourself, if you select the more economical alternative of this conversion instead of sending the equipment for conversion to Neumann.

1. Soldering work in the equipment carrier MS 80

A wire connection has to be installed between the following connecting points of the printed wiring:

RAS 80 A 30 to VSA 80 A 26
STO 80 A 30 to VSA 80 A 30

(Upper line of the PC-board connectors counting from top to bottom from 1 to 33).

2. Soldering work on the PC board STS 80

Remove the resistors R 14 (15 k) and R 22 (100 k) and substitute the condensor C 9 (0.1 F) ~~through~~ WITH a wire bridge. THIS MEANS REMOVE R14, R22 & C9 - AND GROUND PIN 14 of IC4

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3. Soldering work on the PC board RAS 80.

Remove the resistors R 27 (15 k) and R 34 (100 k) and substitute the condensor C 14 (0.1 F) through a wire bridge.

Remove R27, R34 & C14 And Ground IC6 Pin 14.

C) Exchange of STO 80 or SKA respectively

When the work described in paragraph A and B is executed please exchange the STO 80 (in the lower part of the machine) or the SKA respectively. For removing the SKA, the Philips screws at the upper and the lower end of the front panel have to be removed and these have after exchange again to be fixed.

The STO 80 is supplied in the same way as the VAS 80 with conductive protecting rails on the pin connector which have to be removed and after exchanging have to be put on the pin connector of the exchanged card.

D) Operation

You can now again use the equipment as usual. Special alignment work has not to be made. How to make use of the new controls is described in the amendment for the manual "MINIMUM DEPTH REDUCTION".

Please observe when soldering on the PC boards that these are equipped with CMOS integrated circuits. For the protection of these circuits it is absolutely necessary that the soldering person as well as the soldering iron are electrically conductive connected with 0 Volt of the plug-in PC board.

C) Replace STO 80 i.e. SKA

Having completed the rewiring modification in paragraphs A and B and having replaced the STO 80 in the VMS 80 or the SKA in the transfer console the modification is complete.

a) Loosen Philips screws and lift the SKA unit upwards.
Replace module SKA with SKA/MDR and secure unit.

b) Remove protective plastic covers and exchange STO 80
with STO/MDR. Re-use protective covers when returning the PCB.

D) The Operation

Switch on the unit and operate as usual. No special realignment necessary if VSA 80 has not been replaced.
If the PCB VSA 80 has been exchanged proceed to line up the VMS 80 according to paragraphs 4.3 and 4.4 of the operating manual.
Additional functions of the MDR unit are explained in the appendix.

Attention

It is recommended that the soldering iron and the person who carries out the modification is earthed, i.e. CMOS-IC's are very sensitive and could be destroyed.