

## Installation of a new separating belt with straight connection

**Attention!** Before commencing the fitting of a new belt, check all moving parts for wear. Check particularly all the separating belt drive parts before changing the belt.

- Check drive chains
- Plastic chain guides
- Sprockets

If any components need replacements, consult the Märtens Replacement Parts List and obtain these before changing the belt.

Belt installation is a two handed job with one man positioned on either side of the machine.

1. With the cover plates removed clean all accessible parts of the machine of any product residue that may be present.
2. Cut the damaged belt longitudinally in the middle of the belt between the support plates using a pair of scissors.
3. The lock-nuts and washers holding the belt to the chain can then be removed. **(Please note that lock-nuts cannot be re-used)**. Use only self locking nuts (Nylock or the like) for this purpose.
4. Now the belt end rollers may be removed. The stainless steel tube rollers are connected to the chain sprocket stub shafts by quick release couplings on the universal joint units. Push back the grommet which serves as the coupling „lock“ and then push the knurled section of the quick release coupling towards the centre of the machine to release from the stub shaft.

With both couplings dis-engaged, the shaft can be telescoped and removed. The relative positions of the stub shafts should be noted for ease of reassembly. In particular when dismantling the drive shaft the following should be borne in mind:

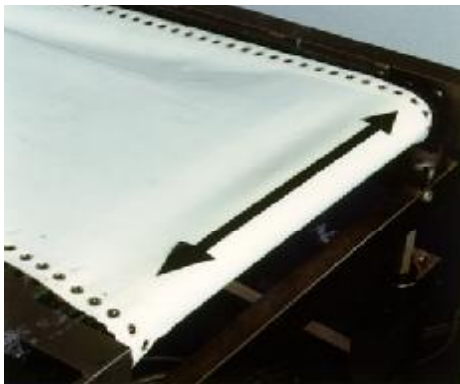
The key grooves in the stub shaft and the couplings must be perfectly aligned, otherwise the chain attachment studs and the eyelets in the belt will not be aligned and the belt cannot be mounted.

5. The old belt can now be removed and all components should be cleaned thoroughly.
6. Now the assembly of the new belt can be started.

Remove the belt from its packing, taking care not to damage the belt in the process. Under no circumstances should a sharp blade be used to unpack the belt.

7. Ensure that the belt is mounted in the correct direction of running; indicated by an arrow marked on the underside of the belt on one edge. Now carefully guide the belt between the belt support plates.
8. The end rollers can now be remounted.

Begin by mounting the plastic shaft end. Engage the coupling on to the stub shaft with the key and key-slot properly aligned, and click the quick release sleeve into position. Replace the rubber grommet to lock the sleeve in position. Repeat the procedure at the other end of the roller.



9. Care must be taken to ensure that the separating belt is installed parallel with the chain attachment studs exactly in-line and parallel to the axis of the end rollers.

Use one of the belt joints to ensure correct alignment.

10. Commence belt installation of the narrow end of the separating conveyor. Locate a few eyelets over the chain attachment studs on one side and then stretch the belt on to the corresponding studs on the other side. This procedure requires a certain amount of force. This operation is facilitated by one operator pushing the belt from one side whilst the other both pulls and locates the eyelet with the studs. This section can then be secured with lock nuts and washers.

**Caution: Take particular care that no washers or nuts fall under the belt**



11. To avoid excessive local belt loading, fix the belt to the chain with Cable Ties. Use approximately 4 cable ties on each side spaced equally along the length of the belt. Secure each cable tie with a nut and washer. If the cable tie is not long enough, two can be looped together.
  
12. Now the belt can be indexed forward approximately 300 mm. If the machine cannot be driven by the motor the shaft can be manually turned using the hexagon end on the drive shaft. A further section of the belt can then be hooked on to the studs and secured with washers and lock-nuts as before.
13. Item 12 is repeated to complete the belt installation.
14. Fasten any remaining nuts and washers to complete the operation, but only in that way that conveyor belt and metal loops will not become squeezed. Even nut loading is best achieved by the use of an adjustable electric screwdriver. Finally replace the machine guards.

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