

R0015140 Spindle energy chains and looms

Installation and routing of control cables and pipes to connection boxes

 Difficulty **Medium**

 Duration **2 hour(s)**

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Comments

Introduction

Tools Required

Standard screw driver set
Flush side cutters

Parts Required

A0000344 Energy chain bracket set x 8
A0000343 Energy chain x 4 (metres)

Step 1 - Unless otherwise stated

Use Loctite 243 on all fasteners
Pen mark bolts once finalised



Step 2 - Spindle energy chain assembly

Assembly 8 off spindle energy chains with

27 links for Aluminium infill plate variant

OR

21 links for no infill plate variant

of A0000343 and 1 pair of A0000344


Assemble as image



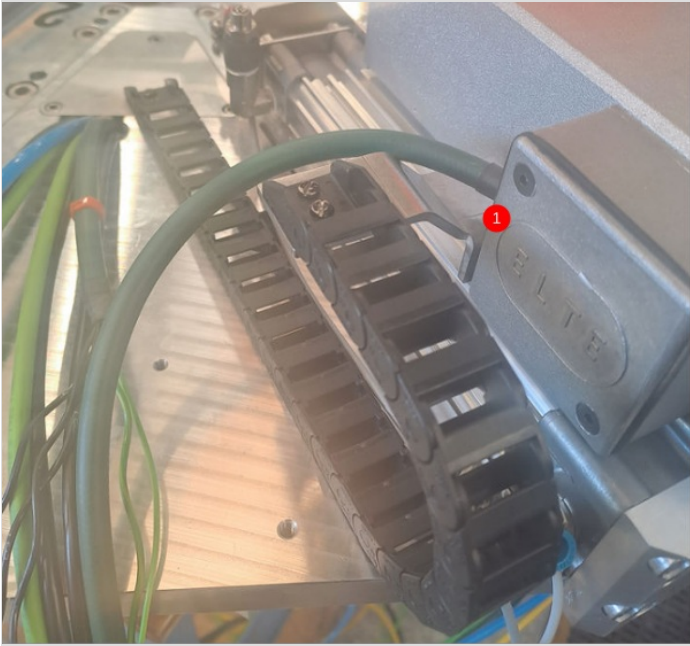


Step 3 - Aluminium Infill only Mount energy chains

1 Use 4 off m3 x 6 pan head screws and mount energy chains as shown. Ensure energy chain is mounted parallel to the cylinder

 ...When fitting energy chains, ensure they are fitted true to cylinder. Check brackets are not bent and alignment is correct (parallel)
Photo included to show incorrect

2 Disconnect end shown ready for cabling



Step 4 - Clearance checks

It is vital to check that energy chain and mounting bracket clear air fittings when assembly is moved.

Bracket may require adjusting to clear if interference is experienced .

Ensure all spindles are checked



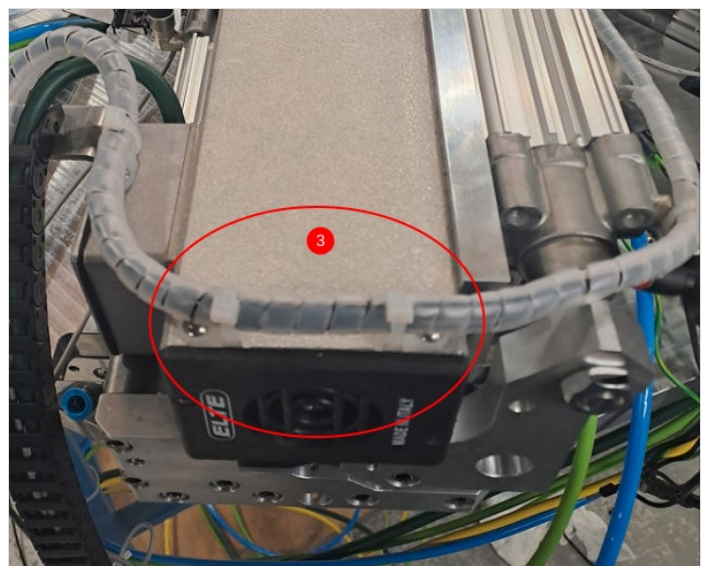
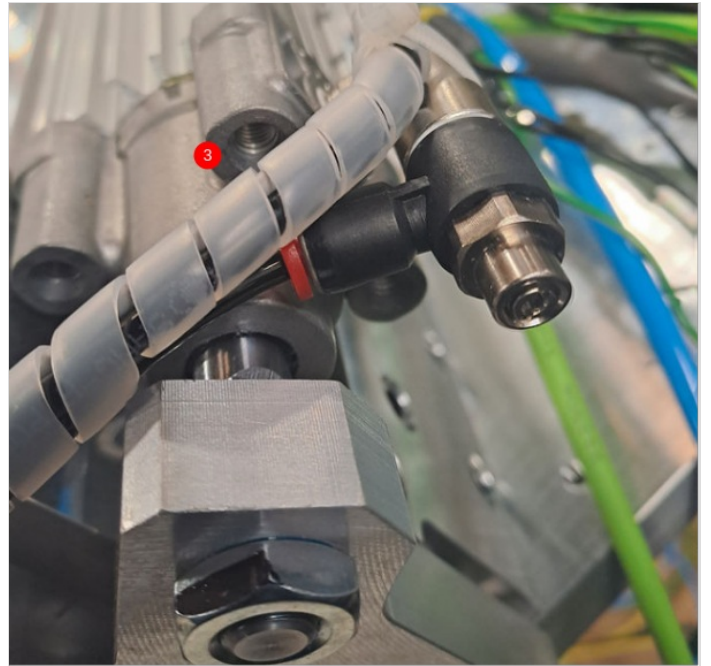
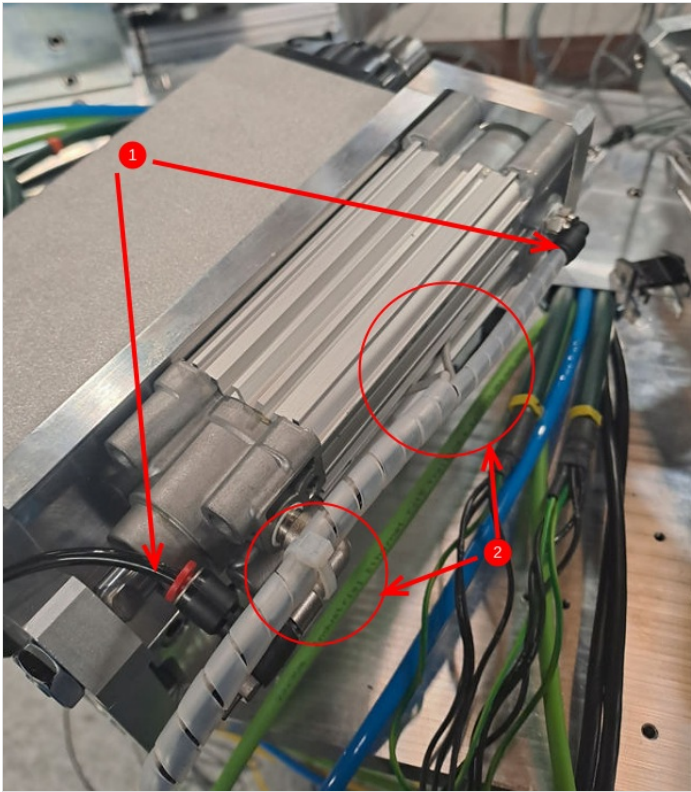
Step 5 - Double plunge control routing

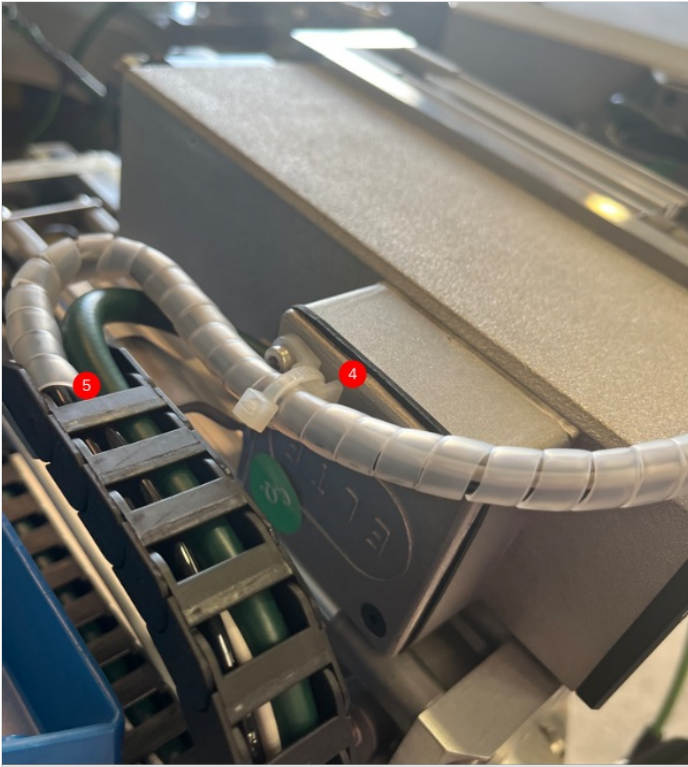
- 1 cut 8 off lengths of 4mm black air pipe at 1250mm . Fit to all double plunge cylinder fitting
- 2 Use small cable wrap at 840mm long to start loom at cylinder end. Incorporate reed switches as passing. Add tie wrap to secure loom
- 3 Continue loom and fix to tie bases as passing
- 4 Continue loom over terminal box and secure on Tie base
- 5 Place looms as shown through energy chains

Only reconnect energy chains if aluminum infills are fitted , leave flying if no infill is fitted

- 6 Reconnect energy chain and leave flying tails in centre of the ring

Repeat for 3 other double spindles





Step 6 - Single plunge cable routing

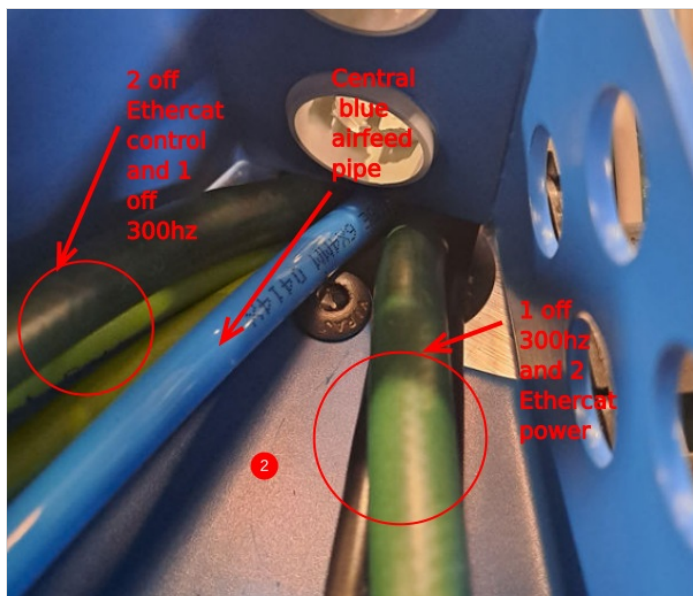
Feed motor cable through energy chain and reconnect as shown



Step 7 - Aluminum infill only Mount pre assembled connection boxes

1 Mount connection boxes using M5 x 10 button head at cable end and 2 off M5 x 12 cap heads with washers at other end

2 Cables should be separated as shown



Step 8 - Aluminum infill only Clearance checks

It is vital to check clearance in the following area. There must be no contact in this area when the spindle is plunged forward. If contact is occurring, the connection box will need adjusting to gain clearance

To Adjust

- 1 Remove spindle connection box
- 2 Elongate mounting holes to give movement in the direction required
- 3 Refit and adjust to achieve clearance

