

Medical Device/Equipment ALERT

Ref. MDEA(NI)2007/38

Issued: 2nd May 2007

For:

IMMEDIATE ACTION	
ACTION	✓
UPDATE	
INFORMATION	



HEALTH ESTATES

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	Section								
Medical Device/Equipment: Plastic two-part self-assembly step/kick stools	▶ ①								
Problem: Self-assembly stools may be damaged inadvertently during assembly or if trapped in moving structures such as mobile shelving. This may increase the risk of collapse during use. Two reports have been received of the collapse of a plastic two-part self-assembly step/kick stool resulting in injury to the user. The stools involved in both incidents were Twin Step stools (model number 6100) manufactured by Twinco A/S of Denmark.	▶ ②								
Action by: This notice should be brought to the attention of all appropriate managers and staff.	▶ ③								
Action: If plastic two-part self-assembly step stools are currently in use, checks should be made to ensure that they are undamaged and that all clips and pins are present and properly secure.	▶ ④								
Distributed by NIAIC to: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Chief Executive of each HSS Board</td> <td style="width: 50%;">General Medical Practitioners</td> </tr> <tr> <td>Chief Executive of each HSS Trust</td> <td>General Dental Practitioners</td> </tr> <tr> <td>Chief Executive of each Agency</td> <td>Community Pharmacists</td> </tr> <tr> <td>NIAIC Liaison Officers</td> <td>Hospices</td> </tr> </table>	Chief Executive of each HSS Board	General Medical Practitioners	Chief Executive of each HSS Trust	General Dental Practitioners	Chief Executive of each Agency	Community Pharmacists	NIAIC Liaison Officers	Hospices	▶ ⑤
Chief Executive of each HSS Board	General Medical Practitioners								
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NIAIC Liaison Officers	Hospices								
Contacts Details of NIAIC contacts for technical aspects.	▶ ⑥								
Feedback Requirements to NIAIC None required.	▶ ⑦								

This Alert is on our web site: <http://www.dhsspsni.gov.uk/niaic>

1. DEVICE/EQUIPMENT:

Plastic two-part self-assembly step/kick stools

2. PROBLEM:

Self-assembly stools may be damaged inadvertently during assembly or if trapped in moving structures such as mobile shelving. This may increase the risk of collapse during use.

Two reports have been received of the collapse of a plastic two-part self-assembly step/kick stool resulting in injury to the user. The stools involved in both incidents were Twin Step stools (model number 6100) manufactured by Twinco A/S of Denmark.

The Twin Step stool (see Figure 1) is available in a variety of colours from a number of UK-based suppliers. The top half of the Twin Step stool has three legs, each with a plastic snap-fit clip and two locating pins. It is assembled by inserting the snap-fit clips and pins into the corresponding holes in the base (see Figure 2,)

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Figure 1 - Twin Step stool

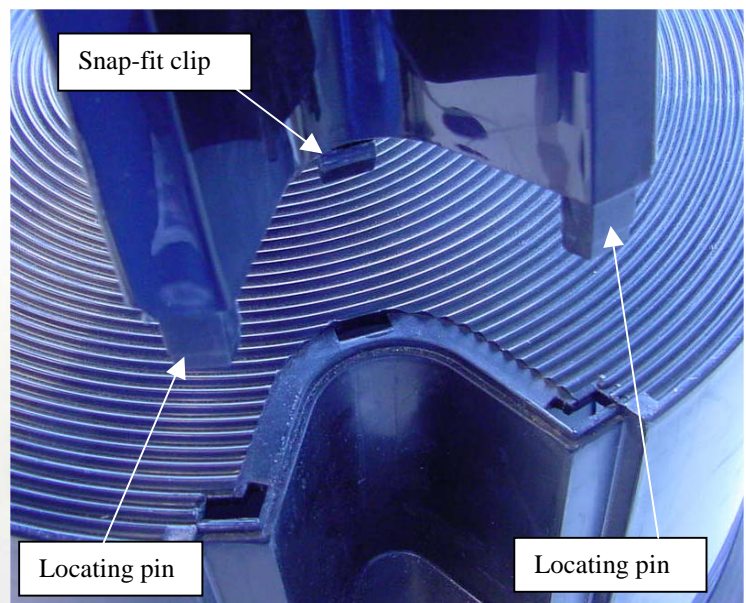


Figure 2 – Method of assembly

Examination of one of the collapsed stools revealed that some of the plastic pins were deformed and discoloured, indicating that they had been stressed. Other pins had broken off, possibly during the collapse. The supplier examined the stool and concluded that it had been trapped in mobile shelving as this would have compressed the sides of the stool and weakened the clips and pins.

Scottish Healthcare Supplies examined the second collapsed stool and found that the clip on one leg had broken off. The two remaining clips were deformed, possibly during assembly or as a result of not being pushed far enough into the lower section of the stool. As a result, the clips did not provide a secure fixing for the two parts.

Further investigation by Scottish Healthcare Supplies included examination and testing of a further 9 Twin Step stools of varying age. All but one of these stools showed signs of deformation to the clips (see Figures 3 and 4, making the stools more susceptible to accidental disassembly (e.g. while being kicked along the floor) and subsequent collapse while in use.

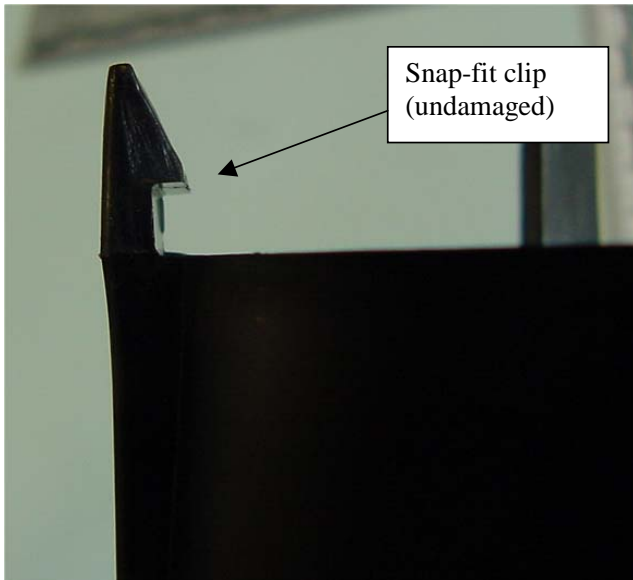


Figure 3 – Snap-fit clip

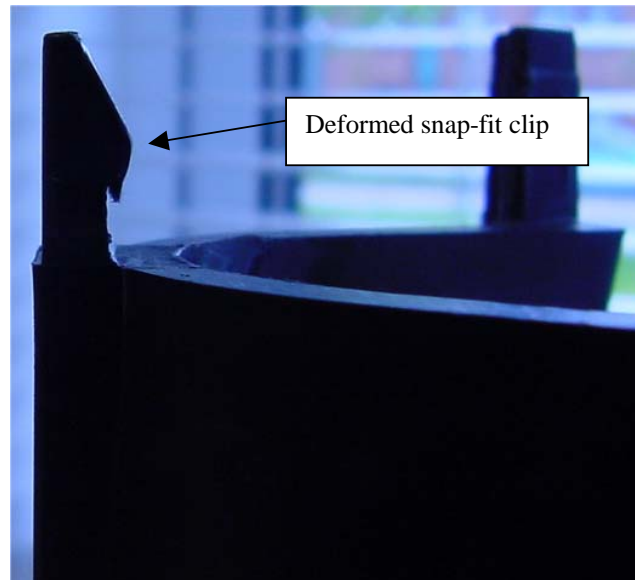


Figure 4 - Snap-fit clip (deformed)

The two parts of the Twin Step stool require a considerable force to push them together securely. This may be difficult to achieve and to check, especially as each snap-fit clip relies on an overlap of just 2-3mm when the clip is pressed fully into the holes in the base. Reliance on self-assembly may increase the risk of user error and distortion of the snap-fit clips during assembly.

Twinco A/S has made modifications to improve the effectiveness of the locking mechanism on Twin Step stools manufactured from September 2005. The date of manufacture is stamped on the underside of each part in the form of a circular arrangement of numbers, representing months, with a two-digit figure in the centre representing the year.

Scottish Healthcare Supplies has no reason to believe that there are any problems with the modified Twin Step stools manufactured from September 2005, provided that all three snap-fit clips are fully engaged during assembly.

Alternatives to plastic two-part self-assembly step stools include one-part moulded or pre-assembled plastic step stools, or metal step stools. Some of these alternatives may be slightly more expensive.

3. ACTION BY:

This notice should be brought to the attention of all appropriate managers and staff.

4. ACTION:

If plastic two-part self-assembly step stools are currently in use, checks should be made to ensure that they are undamaged and that all clips and pins are present and properly secure. This should include examining the underside of each stool and also applying a pull test using moderate force to see if the legs come away from the base. A record should be made of successful checks.

If there is doubt about the security of any of the legs where they attach to the base, or if any of the legs separate from the base during a pull test (or at any other time) the stool should be removed from use immediately.

The above Action points apply to all makes and models of plastic two-part self-assembly step stools but particularly to Twin Step stools manufactured by Twinco A/S of Denmark prior to September 2005.

Consideration should be given to discontinuing the purchase of plastic two-part self-assembly step/kick stools in favour of alternatives (see Background paragraph 9). Where plastic two-part self-assembly step stools are currently in use, consideration should be given to replacing them.

Care should be taken to avoid trapping step stools (all makes and models) in moving structures such as mobile shelving. This may weaken the structure and cause them to collapse during use. If any such incident occurs, the stool should be examined carefully for damage or weakness and removed from use if there is any doubt as to the integrity of its structure.

5. ONWARD DISTRIBUTION TO:

Please bring this notice to the attention of all who need to know or be aware of it. This will include distribution to:

- Liaison Officers
- Risk Managers
- Health & Safety Officers/Advisors
- Device Managers
- Estates Managers
- Accommodation Officers
- Independent Health and Social Care Providers – Private Clinics, Residential and Nursing Homes through RQIA
- Stores
- Supplies/Procurement

6. CONTACTS:

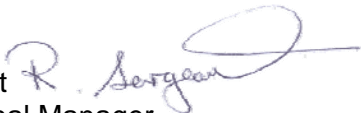
Enquires to NIAIC should quote reference number MDEA(NI)2007/38 and be addressed to:

Northern Ireland Adverse Incident Centre (NIAIC)
Health Estates
Estate Policy Directorate
Stoney Road
Dundonald
Belfast BT16 1US

Tel: 028 9052 3868
Fax: 028 9052 3900
Email: NIAIC@dhsspsni.gov.uk

7. FEEDBACK:

None Required

Robert Sergeant 
NIAIC Operational Manager

HOW TO REPORT ADVERSE INCIDENTS

Adverse Incidents relating to medical devices, non-medical equipment, plant and buildings should be reported to NIAIC as soon as possible. Advice on how to report is given in MDEA(NI)2006/01. If you are in doubt about how to report incidents, please speak to your liaison officer or contact NIAIC using the telephone number provided. Adverse Incident reporting forms and an on-line reporting facility are available on the NIAIC website at www.dhsspsni.gov.uk/niaic

Heath Estates is an Executive Agency of the Department of Health, Social Services and Public Safety