

Date: 2015-10-14

Subject: E-Series 5000 Escalator -
Welds on Lower Track Sub-Assembly

E-Series 5000 Escalator - Welds on Lower Track Sub-Assembly

Product Affected

The lower track sub-assembly for E-Series 5000 Escalators.

Issue

There have been instances of broken welds on the lower track sub-assemblies in the areas shown between the arrows of Figure 1 & 2.

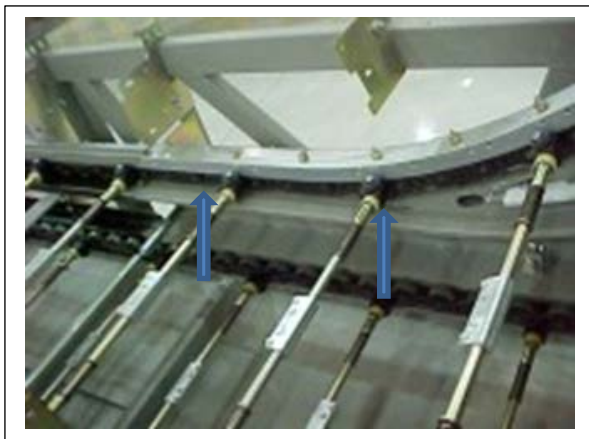


Figure 1. Identification of weld areas

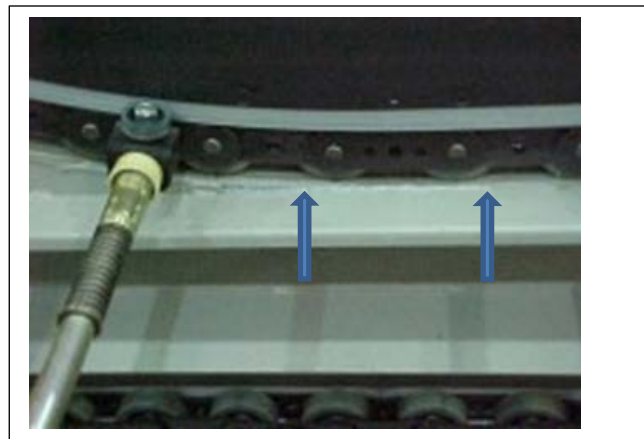


Figure 2 Identification of weld areas

The welds in the areas shown will be either on the top or on the bottom surface of the track and should meet the following criteria as a **minimum**:

- Welds should be 1/8 inch in width. Wider is acceptable as long as the step chain wheels do not roll against the weld.
- Welds should be 1/2 inch to 3/4 inch in length. Welds must **NOT** be shorter than 1/2 inch in length.
- Spacing from the center of one weld to the center of the next weld is to be no more than 8 inches. Closer spacing is good (although a continuous weld bead could cause distortion of the track sub-assembly).

Cause & Effect

NOTE: All applicable safety procedures must be followed when performing any work.

If the existing welds do not meet the criteria specified above, a repair will be required to strengthen the welds.

If inspection reveals that the track is bent down in this area, an immediate repair is required.
Refer to the Repair Instructions below.

Repair Instructions

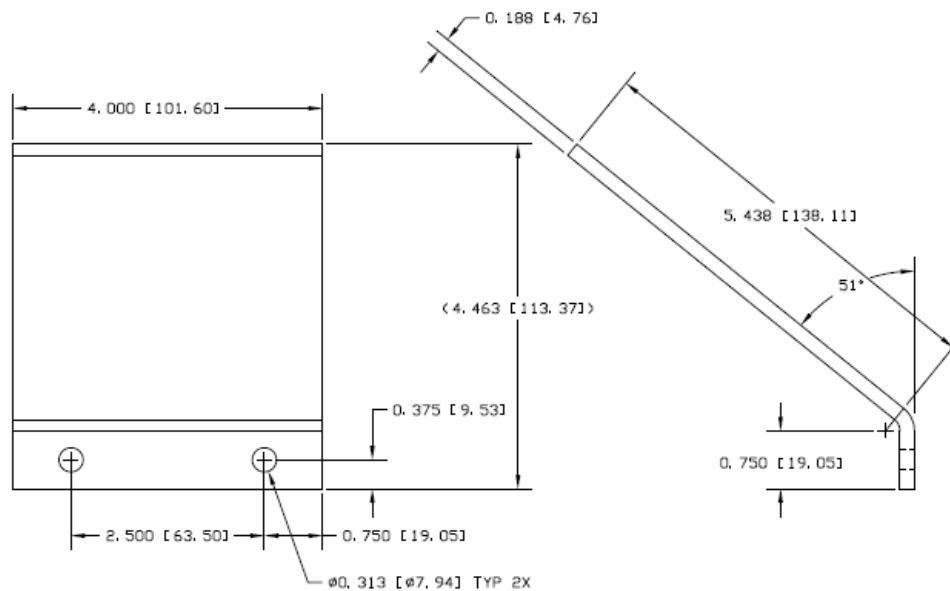
The prescribed method to strengthening/repair the track sub-assembly is to move the displaced track back into position and secure it in this position by adding a series of welds that are 3/16 in. [4.76mm] wide and 3/4 in. [19.05mm] long, with a center-to-center spacing of not greater than 4.00in. [101.6mm]. The repair welds can be added to the top surface of the track.

Protect the step chain from weld spatter & heat.

If the placement of the welds results in interference between the weld material and the step chain wheels, grind the welds flush with the track surface.

Add the stiffening gusset shown in Figure 3 in the location shown in Figure 4. The gusset will provide additional support to the track assembly and reduce the stresses experienced by the repair welds.

Figure 3 Additional Gusset to be added



Repair Instructions (Continued)

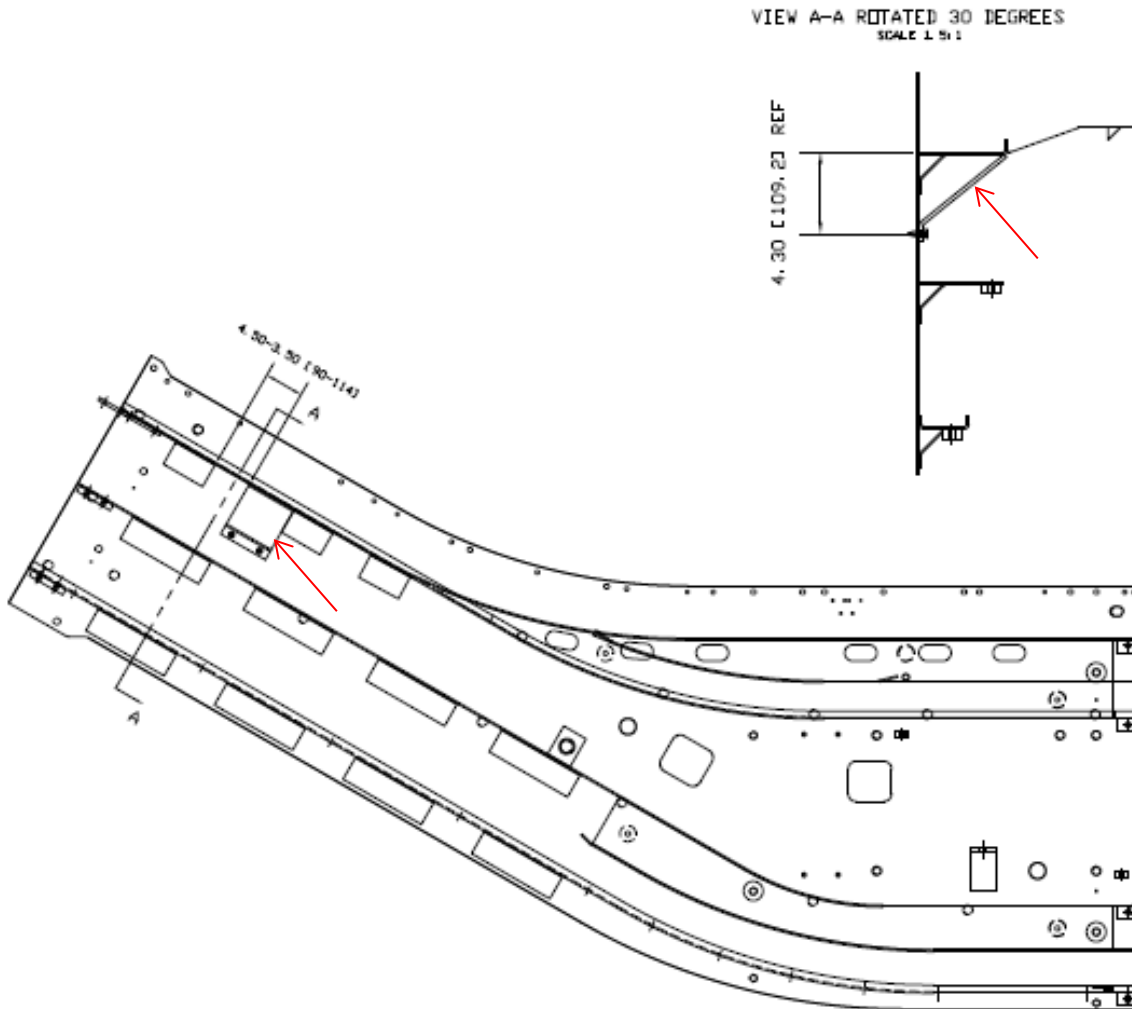


Figure 4 *Mounting of support gusset in lower track sub-assembly*

Align gusset in approximate location as defined in figure 4 above. Holding formed edge flat against track subassembly side sheet, position opposite edge on edge of track. Mark positions of holes provided in gusset.

Remove gusset.

Using a letter "F" drill bit [Decimal = 17/64 inch], drill holes through track sub side sheet in the locations previously defined.

Repair Instructions (Continued)

Attach the gusset as shown using two (2) 5/16-18 (inch) self-tapping screws.

Weld the opposite (top) edge of the support gusset to the track profile. Add three welds 1/8 in. [3.3 mm] wide and 3/8 in.[9.7mm] long, with a center-to-center spacing of approximately 1.00 in. [25.4mm].

Avoid overheating the track profile as this can result in distortion of the profile.

Materials Required for Repair

- 1 KM51179845R01 Kit, Gusset Track Support
- 2 Letter "F" Tap Drill (Decimal 17/64 inch)

If a repair is required, please contact Meagan Bailey, Maintenance Operations Associate, at 309-743-5020 to obtain material.