

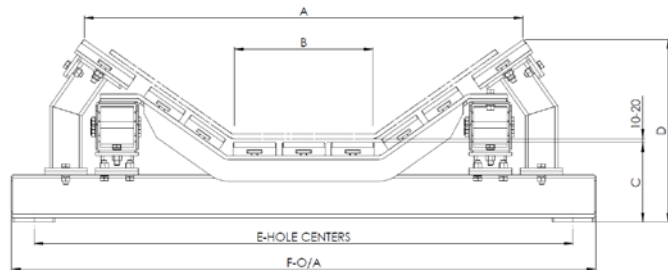
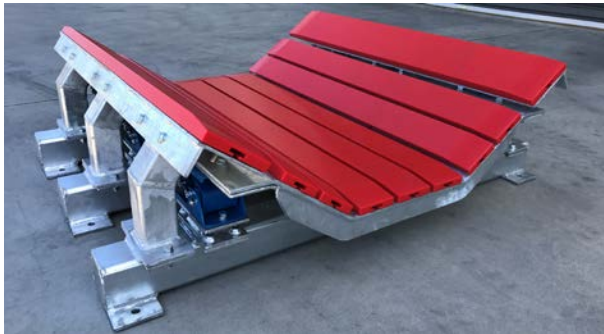
Installation Instructions - K-Shield® Dynamax Impact Belt Support System (Dismantlable)

Kinder Australia
product: Product
category: Issue date:
Revision:

K-Shield® Dynamax Impact Belt Support System (Dismantlable)
Belt Support
10.04.2017
1

Overview:

The K-Shield® Dynamax Impact Belt Support System is used to provide proper belt support under a conveyor transfer point and protect the belt from early failure due to pinch point damage. It is used for heavy duty applications where high impact loading is expected and works in addition to what a static impact belt support system would allow by having the impact cradle on springs. Dimensions on the drawing below are provided by the customer prior to fabrication to match the current belt profile and allow a straightforward fitment.

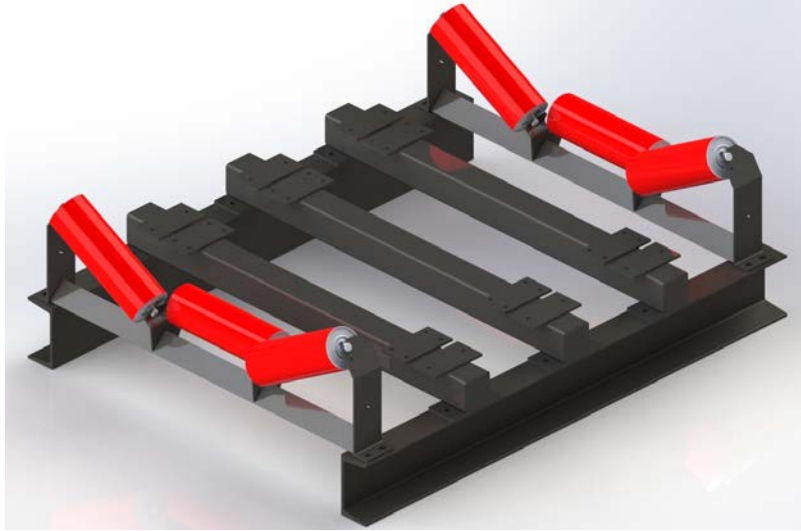


Procedure:

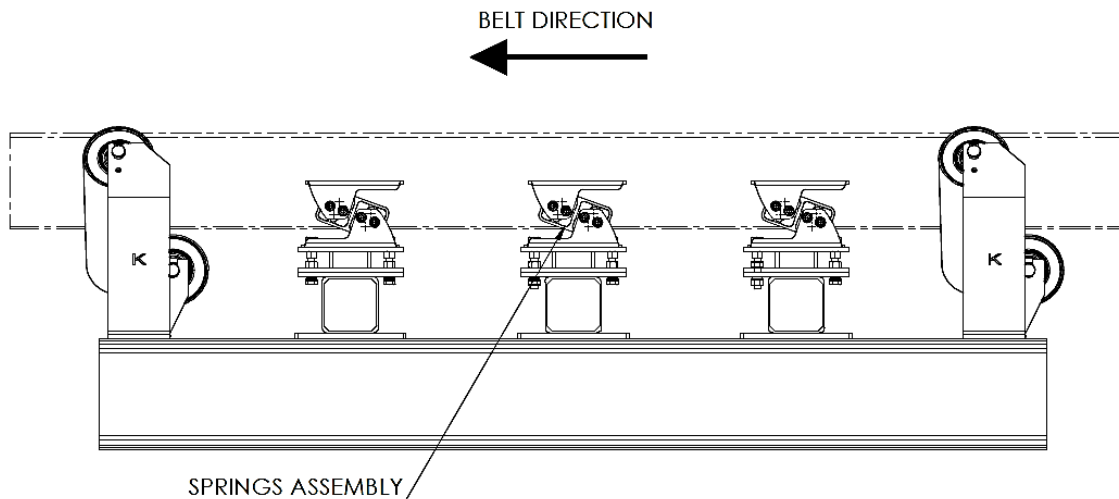
1. Shut down and lock out conveyor before doing any maintenance. A belt lifter in place near the impact zone will improve access for installation.
2. Remove the existing impact idlers from the conveyor structure. Inspect the structure for damage or misalignment.
3. The location of the dynamic impact cradle must have clearances at the leading end from structure, frames and consecutive impact cradles as the torsion springs allow movement forward as they compress downward. The amount varies depending on the specification, however most should allow 10mm between the leading edge of the cradle and other components.
4. Drill holes as required in the stringers of the conveyor for the mounting holes (Dimension E) at the required pitch. Ensure that the unit will be preceded and completed by a fixed or adjustable idler set so that the belt leads both on and off the impact slider bars. Failure to do this will result in reduced impact slider bar life and belt wear.

Installation Instructions - K-Shield® Dynamax Impact Belt Support System (Dismantlable)

- Place each support bar in their place across the stringers and fix with loose bolts.



- Mount each spring on the support bars (inner plates) with spring assemblies in such an orientation that the belt travels in the shown direction. Leave mount bolts loose.

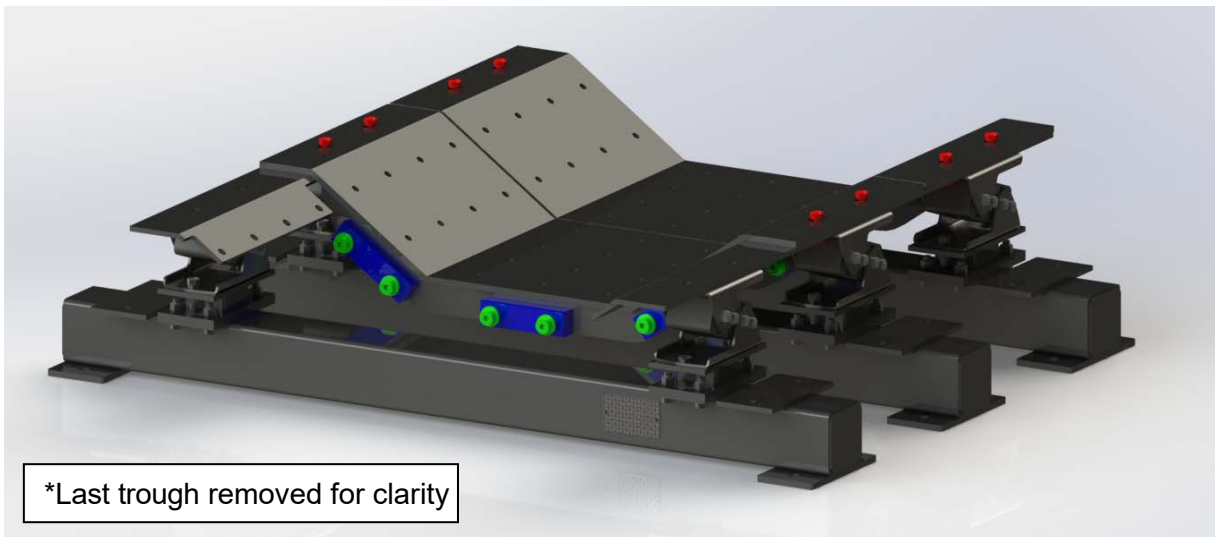


Installation Instructions - K-Shield® Dynamax Impact Belt Support System (Dismantlable)

7. Place trough link plates across both side spring sets.

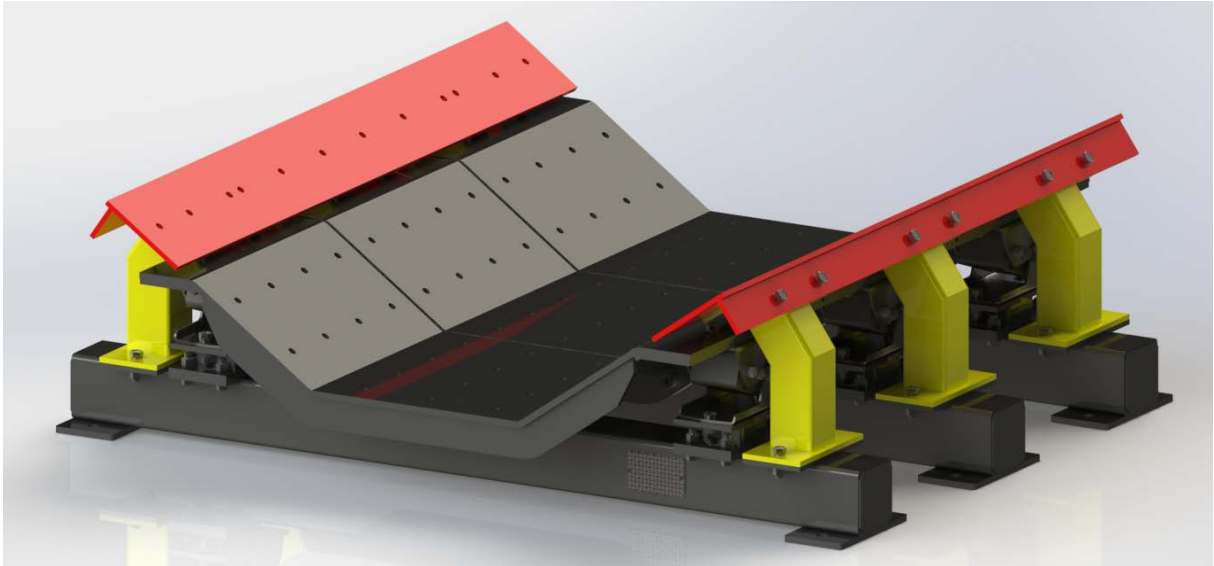


8. Place the impact bed troughs across the assembly on top of the trough link plates. The trough with the holes in both ends on the stiffeners is for the centre. The front and rear troughs should have no holes on the stiffener that faces outside the assembly. Fix to the assembly with M12 bolts (red) to secure the trough and trough link plates. Spacers (blue) fit in between each trough and troughs are secured together with M16 cap screw head bolts (green). Leave all fasteners loose.



Installation Instructions - K-Shield® Dynamax Impact Belt Support System (Dismantlable)

9. Fit the wing supports (yellow) to the support bar (outer plates) and top with the wing rail support plate (red). Secure with M12 fasteners.

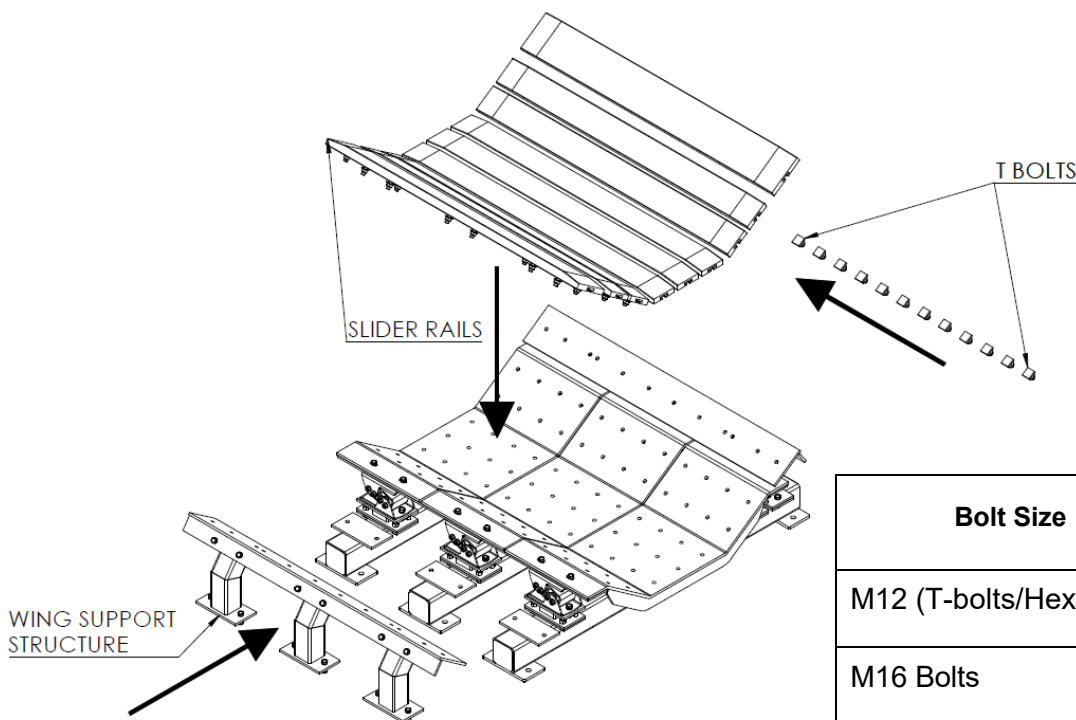


10. Fit the required amount of T-bolts to each slider rail and space them out so they fit the holes in the impact bed trough. Keep in mind where the T-bolt must pass through more than one plate the longer T-bolts should be used for that location. Where varying width slider rails are provided, ensure the correct slider rail is placed in the correct location subject to the final design.



Installation Instructions - K-Shield® Dynamax Impact Belt Support System (Dismantlable)

11. Check the alignment of the cradle with respect to the belt profile and nearest idler sets. The cradle centre should sit slightly lower than the nearest idler set centre roll as designed.
It is critical that the unit is aligned with the conveyor system; any misalignment will cause belt training problems.
12. Tighten all fasteners on the assembly, including any mounting hardware once aligned with the conveyor system. Refer the below table for the torque settings.
13. Test run conveyor. Inspect the underside of the belt for any damage.
14. The system should be inspected after 8 hours of operation for any loose bolts or damage. Regular inspection should be included in the normal inspection schedule.
15. Minimum thickness of slider rails is 18mm. Slider rails should be replaced at this wear thickness.
16. To replace slider rails, slide the required amount of T bolts into the slider rail and space them out so they fit into their mounting holes. Fasten them with their respective nut and washer. Ideally a belt lifter would be in place to perform this maintenance task, however removal of the wing support structure may provide additional access as shown below.



Bolt Size	Torque Requirement
M12 (T-bolts/Hex Bolts)	92 N.m.
M16 Bolts	215 N.m.