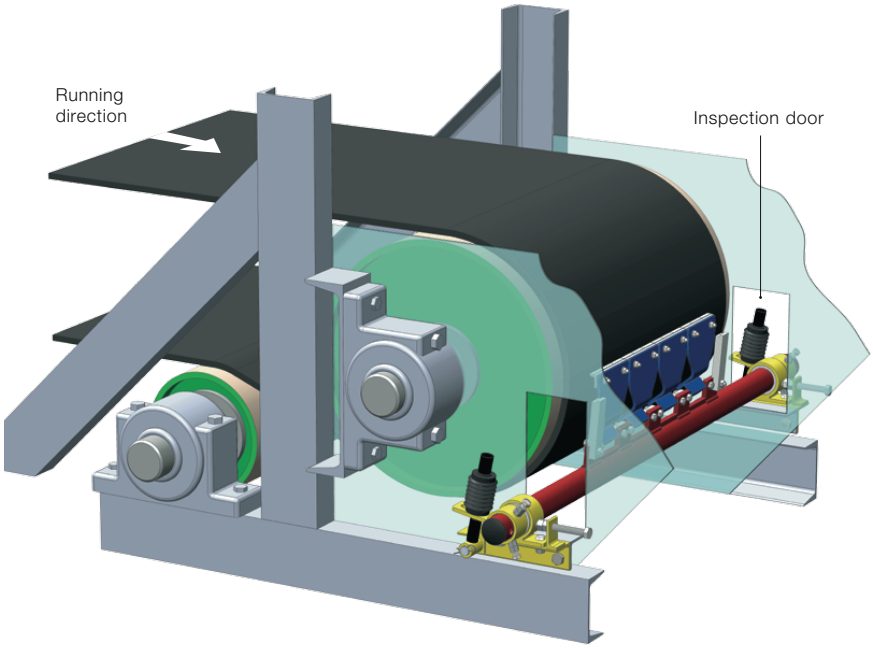
Installation Instructions: K-Calibre Primary Belt Cleaner

Kinder Australia product:	K-Calibre Primary Belt Cleaner
Product category:	Belt Cleaning System Products
Overview:	**Each blade with RTAM** Quickly return to the original position after passing residues **Lighter blade** Cost-saving blade and spring tension Easy visual tension check Easy installation and maintenance **Belt friendly**



Tools Required:
Double ended ring spanner: M12 (½“) / M16 (⅝“),
Adjustable wrench, Marking pen, spirit level, Steel square

WARNING: Always obey all applicable safety rules. Be sure all power to the conveyor has been disconnected and controls are locked out.

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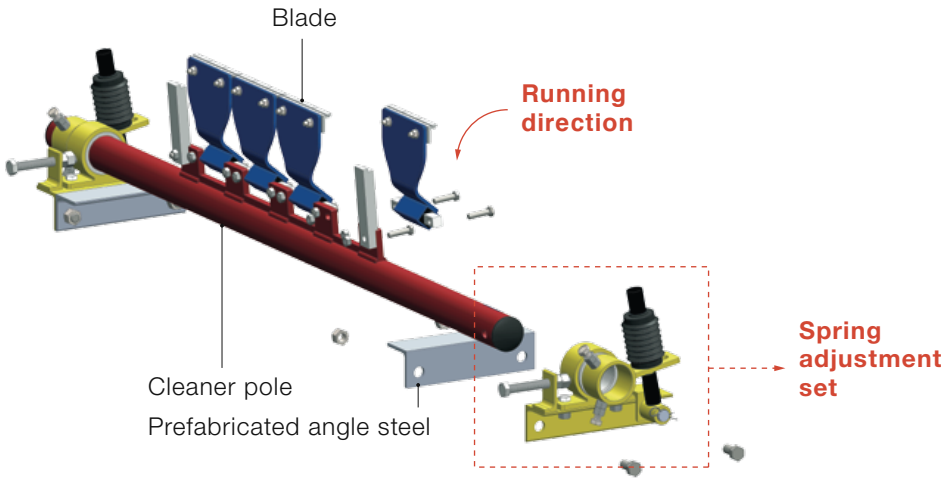
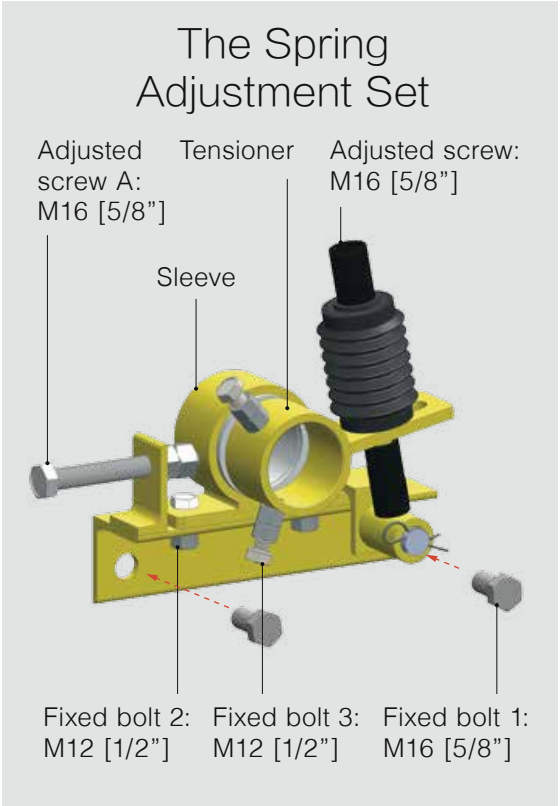
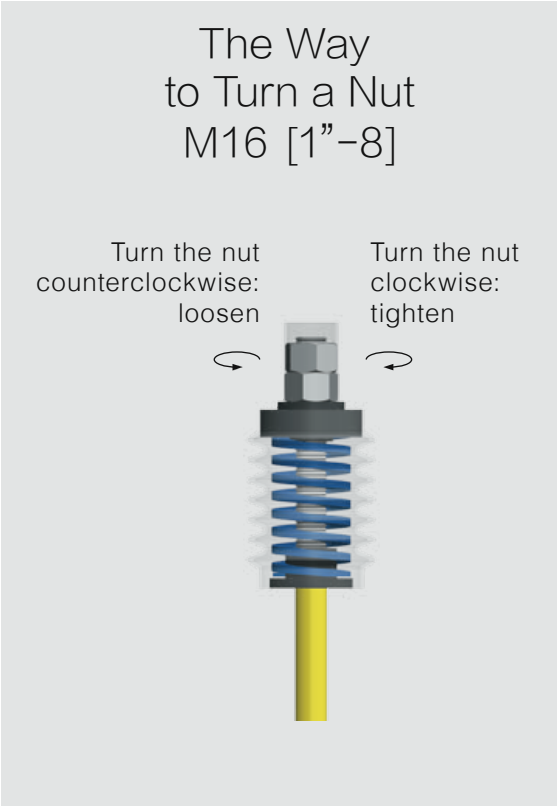
The K-Calibre Primary Belt Cleaner Assembly Drawing:



The Spring Adjustment Set



The Way to Turn a Nut M16 (1"-8)



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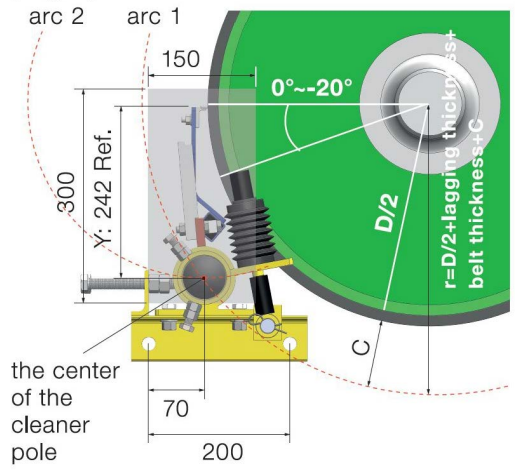
INSTALLATION STEPS

Step 1: Locate the Correct Cleaner Pole Position and Cut the Inspection Doors.

a. Find ØD and C to calculate r. (Fig.1/Chart.1) Then take r for radius and draw the arc 1 from the centre of the pulley. Locate the blades within 0°~-20° below the horizontal centre line of the pulley.

[Fig.1]



Take Y for radius and draw the arc 2 at the point where the blade touches the pulley. The intersection of the two arcs is where the centre of the cleaner pole should be. **(NOTE: locate the correct cleaner pole position or the blades can't completely contact the belt.)**

b. Cut both specified areas of the chute as inspection doors: 150x300mm

[Chart.1] Unit: mm [in]

DIA (D)		C
Ø350 ~ Ø550	[Ø18 ~ Ø22]	115
Ø550 ~ Ø650	[Ø22 ~ Ø26]	105
Ø650 ~ Ø750	[Ø26 ~ Ø30]	100
Ø750 ~ Ø850	[Ø30 ~ Ø33]	100
Ø850 ~ Ø950	[Ø33 ~ Ø37]	100
Ø950 ~ Ø1050	[Ø37 ~ Ø42]	100

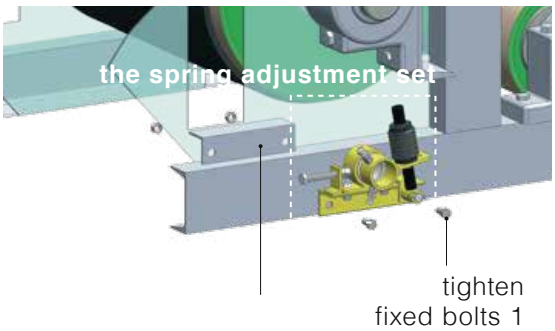
⚠ Be careful when cutting for inspection doors.

Step 2: Install the Spring Adjustment Set

Calculate the location of spring adjustment set. Drill holes or weld the prefabricated angle steel on the chute and make the two pieces together. **(NOTE: make sure holes or welded joint is parallel to another side or the belt cleaner is unparalleled to the pulley.)**

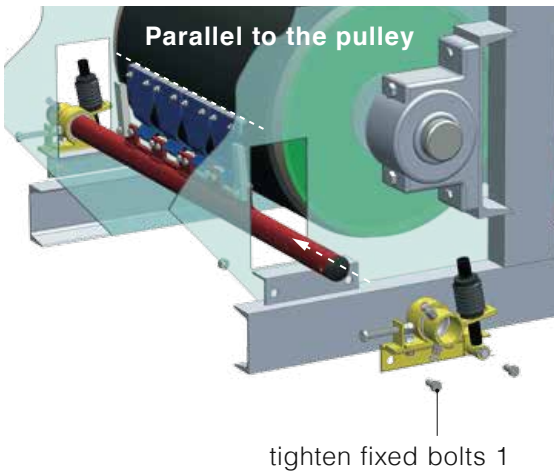
Drill holes: Assemble the fixed bolts 1 and tighten them by the M16 [⅝"] screw set to make the belt cleaner easy to maintain.

Weld: Clean the weld heads and then paint them.



Step 3: Install the Belt Cleaner and the Spring Adjustment Set

Put the blade set with pole in through the inspection doors. Assemble another spring adjustment set and tighten the fixed bolt 1.



⚠ Be careful when moving parts of belt cleaner.

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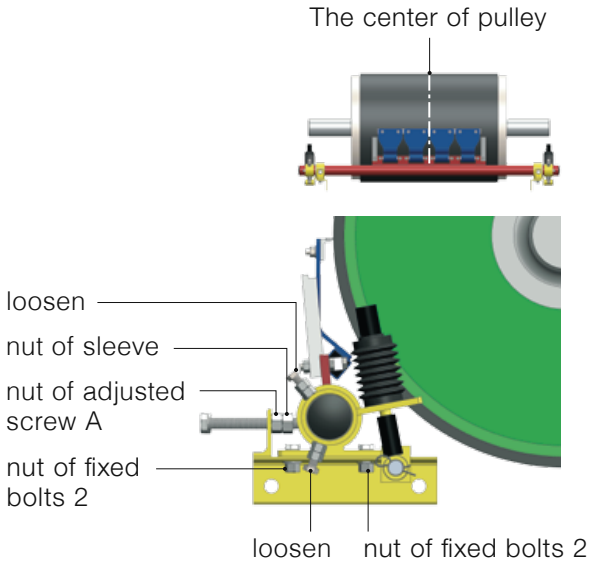
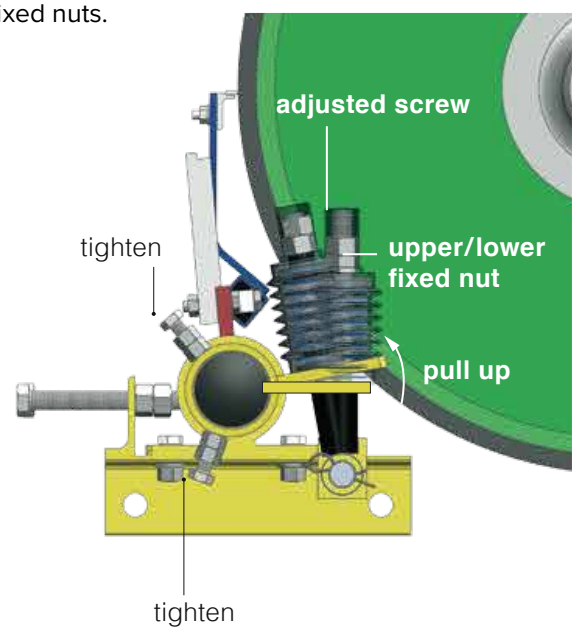
Step 4: Align the Blade Set with the Centre of Pulley and Contact the Belt Surface

Move the blade set to align the centre of pulley. Rotate the cleaner pole and adjusted screw A until full blade to belt contact. **(NOTE: Completely contact the belt surface or decrease the scraping forces.)** Then tighten the nuts of sleeves, fixed bolts 2, and adjusted screws A.



Step 5: Adjust for Spring Performance

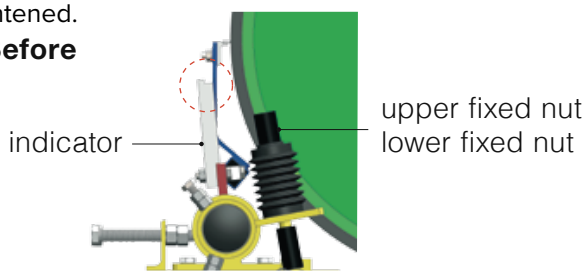
Loosen up the two nuts on adjusted screw until the end. Pull up the plate of tensioner until the top of spring touching the bottom of nut again. **(NOTE: keep holding the plate.)** Loosen grip after tighten fixed bolts 3 and fixed nuts.



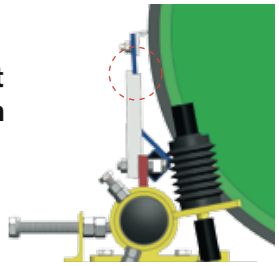
Step 6: Adjust the Indicator

Rotate the lower fixed nut to set the indicator in the proper position. Hold the lower fixed nut by wrench and rotate to tighten the upper nut. Confirm both indicators on each side in the proper position and the upper nut tightened.

Before

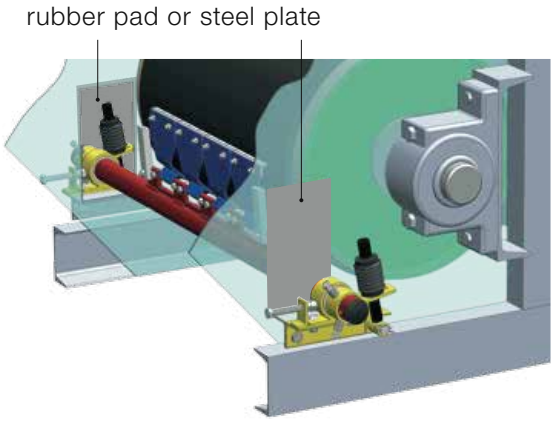


After: correct tension



Step 7: Complete Installation and Test Run at least 15 Minutes

Recheck all fasteners are tightened and remove all installation materials and tools from the conveyor area before running test. **(NOTE: After the test run, using a shield, such as rubber pad or steel plate to cover the hole prevents overflow in operation.)**



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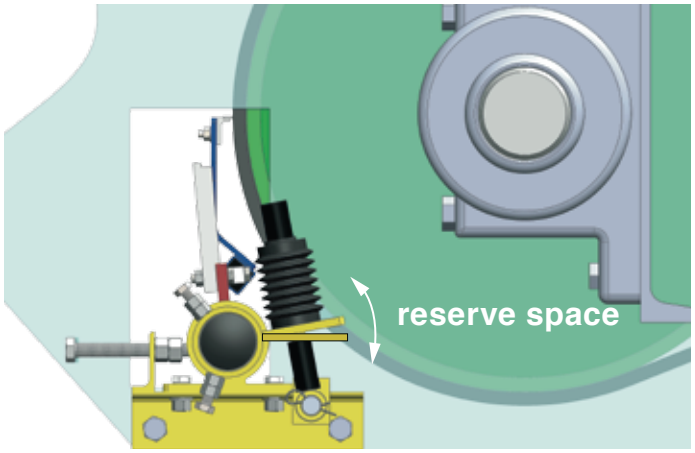
Workers are required to wear hard hats, glasses or face shields, gloves, work shoes or boots with slip-resistant and puncture-resistant soles, and so on at all times on the job site to maintain in good working condition.

Hazards	Causes	Solutions
Cuts, scratches and grazes	Get a cut, scratch or graze on the job	1. Use PPE correctly. 2. Injury prevention at work.
Stab	Stabbed by an iron nail and sheet metal	1. Clean iron nails and sheet metal.
Weld	Get an electric shock or explode	1. Locate an airy place, use glasses or face shields, and set a No Open Flames sign. 2. Use an insulated shank with heat-resistant. 3. Remove inflammable and prepare a fire extinguisher.

MAINTENANCE

Maintenance 1: Inspect Blade Tension at least Once per Week and Clean Material Accumulation.

The blade tension will get reduced as blades get worn. Check the tension of the cleaner blade to the belt. Adjust tension if necessary following Step4-5 to adjust blade for better performance. Clean material accumulation to extend service life and have improved performance.

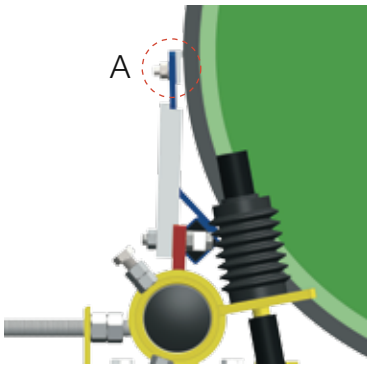


Reserve space for spring to get better performance.

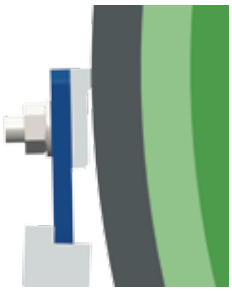
⚠ Before adjusting tension or cleaning material accumulation, turn off and lock out/tag out at the power sources.

Maintenance 2: Check blades for excessive wear and replace if tungsten carbide is worn off blades

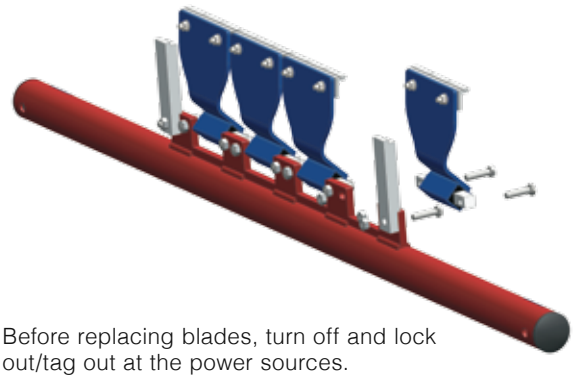
When tungsten carbide is worn off blades, stop operation and replace them to protect belt.



Detail A
worn off blades



DO NOT reuse the screws and nuts on blades



⚠ Before replacing blades, turn off and lock out/tag out at the power sources.

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