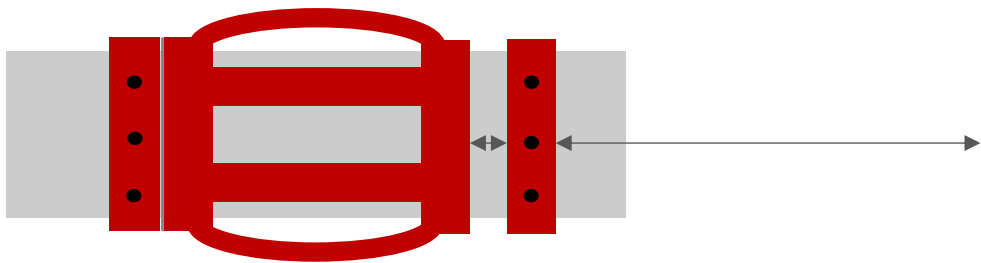


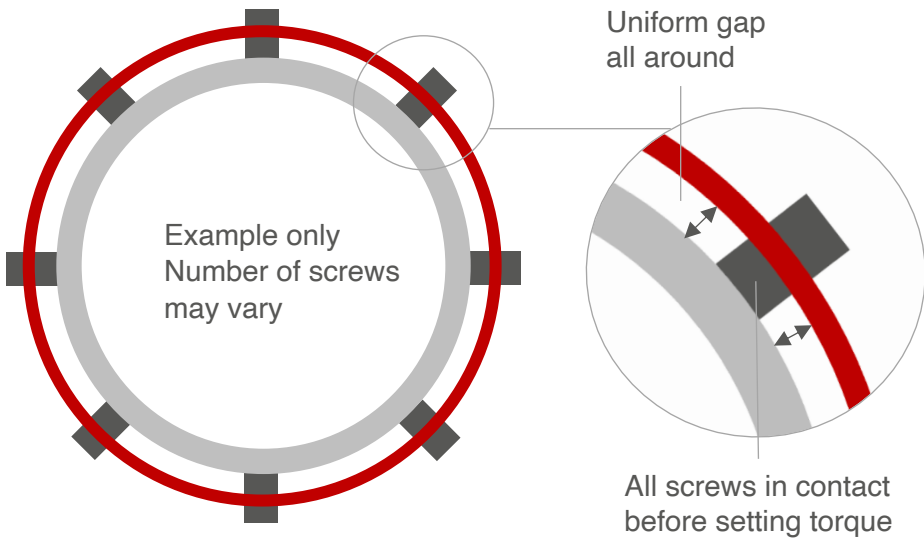
CEN TEK STOP COLLAR INSTALLATION GUIDE



- 1 Look-up gap allowance for second installed stop collar using the Gap Allowance per Product Size table.



- 2 Adjust set screw depth so collar is equal distant from casing on all sides.



- 3 Apply 35 lb. Ft. (47Nm) according to the patterns on page 4, like tightening of wheel nuts. Calibrated torque wrench is advised.

Gap Allowance per Product Size Table

Product Size	Minimum Gap	Maximum Gap
0512-0812 S-H	7mm (0.276")	23mm (0.901")
0512-0834 S-H	8mm (0.314")	24mm (0.944")
0700-0812 S-H	1mm (0.039")	17mm (0.669")
0700-0834 S-H	2mm (0.078")	18mm (0.708")
0958-1214 S-H	5mm (0.196")	21mm (0.826")
0978-1214 S-H	4mm (0.157")	20mm (0.787")
1338-1712 S-H	15mm (0.590")	31mm (1.220")
1358-1712 S-H	12mm (0.472")	28mm (1.102")
1800-2400 S-H	19mm (0.748")	35mm (1.377")
1858-2200 S-H	8mm (0.314")	24mm (0.669")
1858-2300 S-H	13mm (0.511")	29mm (1.141")
1858-2400 S-H	20 mm (0.787")	36mm (1.417")
2000-2400 S-H	10mm (0.393")	26mm (1.023")
2000-2600 S-H	26mm (1.023")	42mm (1.653")
2200-2600 S-H	12mm (0.472")	28mm (1.102")
2400-2800 S-H	11mm (0.433")	27mm (1.063")
2800-3600 S-H	43mm (1.692")	59mm (2.322")



Should the centralizer be fully compressed, its developed length must not be greater than the distance between inner edges of the stop collars. It is, therefore, recommended that the second installed stop collar remain within the range of the minimum and maximum gap allowance values shown in the above table. This gap allowance is required **after** the first stop collar and centralizer have been fully installed and are butted up against each other – [see installation guide](#)

S2 HINGED INSTALLATION GUIDE



1. Install the 1st stop collar at the lowest point required on the casing
2. Manually interlock the hinge fingers. Squeeze together and insert the pin through the hinge by hand as shown in the image above. Ensure pin head is adjacent to the stop collar.
3. Hammer the pin fully home.
4. Tighten and torque all set screws following Section 4 to **35lb.ft.**
5. Use the installed stop collar to rest the centralizer during installation.

6. Remove the centralizer from packing and wrap around the casing.



Please note that due to the weight of the units Centek recommend a 2man lift.

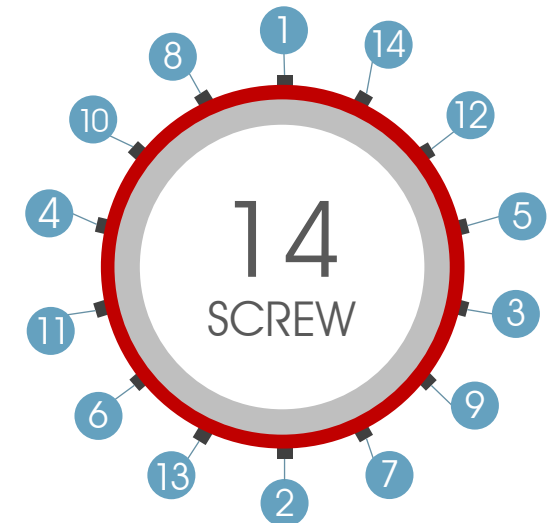
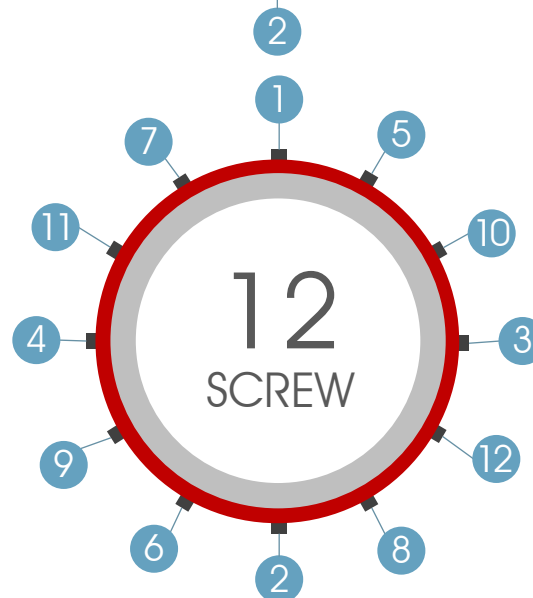
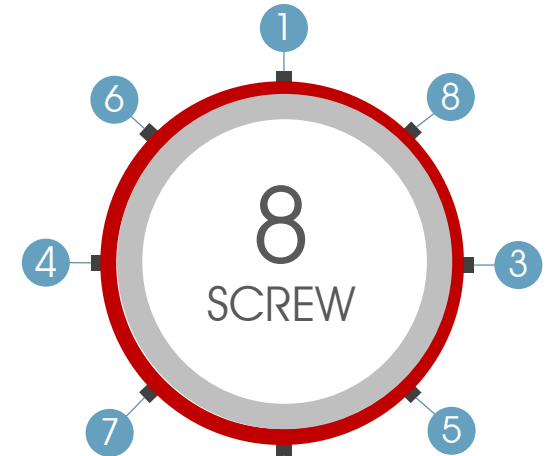
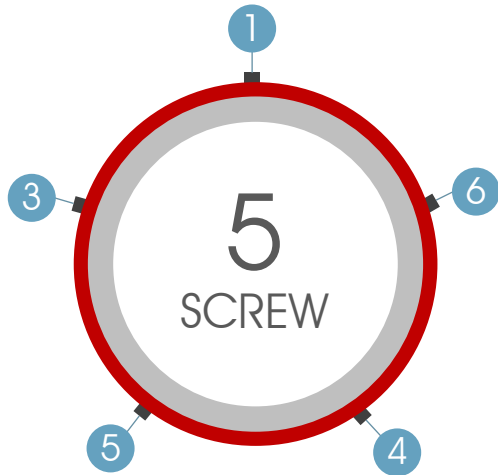
S2 HINGED INSTALLATION GUIDE



7. Manually interlock the hinge fingers. Squeeze together and insert the pin through the hinge by hand as shown in the image above. Ensure pin head is adjacent to the centralizer.
8. Hammer the pin fully home.
9. Repeat steps 7-8 for the opposing end band.
10. Rest the centralizer back onto the stop collar.
11. Remove the second collar from the pallet and wrap around the casing, approximately 2 inches above the centralizer. Ensure pin heads are adjacent to each other.
12. Repeat steps 2-3.
13. Now lower the collar to the Centek recommended minimum gap allowance distance shown in Section 1. tighten and torque set screws as on page 4.

CORRECT SEQUENCE OF TIGHTENING INSTALLATION PROCEDURE

Tighten grub screws in this numbered sequence, alternating between each opposite side of the stop collar until all screws have been tightened to the specified ft/lbs (Nm). Using a calibrated torque wrench is advised.



CEN TEK STOP COLLAR INSTALLATION GUIDE



The function of the stop collar within the borehole is considered vital for the effective installation of the centralizer and hence subsequent cementation. Therefore, it is strongly advised to use the correct equipment and installation methods. Centek stop collars are supplied with ‘**cup point socket head set screws**’ which are M12 dia. X 1.5mm pitch thread, with a 6 mm A/F female hex socket. Centek supplied screws are specially selected for thread form and pitch commensurate with design and axial holding loads – **the use of non Centek supplied screws is not permitted**

Pneumatic tools



This is the preferred method of installation, following Centek Engineering investigations. We recommend that the latest generation pneumatic tool be used with positive, accurate mechanical torque control built in.

Example - typical UK Supplier

‘Uryu’ Pulse Tool. Model Number ULT70, 30-55NM (23-41 lb.ft.) torque range.

Hand operated torque wrenches (must be calibrated)



Typically ‘snap’ type with clear sight window for setting of desired torque.

Example - typical UK Supplier

Britool Torque Wrench Pt. No. 651-383. 15 to 75 lb.ft. (20 to 100 Nm) 1/2" A/F Square drive
Norbar Torque Wrench Pt. No. 2202-183196. 0 to 45 lb.ft. (0 to 60 Nm) 1/2" A/F Square drive

A 6 mm A/F drive key must be used with either of the above options. **Do not ‘cut down’ regular Allen keys** for use in a torque wrench or pneumatic tool. The preferred drive is Centek Pt. No. SA12-HTLL special high performance hex key tool. The ‘HEX PLUS’ precision form on the hex flats allows higher torques and reduced rounding of corners for longer life.



DO NOT use cut of lengths from conventional hand ‘Allen’ keys, that have been obtained by grinding or cutting wheel methods. This method generates sufficient heat to de-temper the key hardness.

Use pre-made key lengths of suitable length to fit securely into socket head of the torque wrench tool etc., ensuring sufficient length protrudes for full depth location in the female hex socket of the set screws.

Typically, the keys are made from an impact resistant ‘sintered carbide’ approximately 1/2" to 5/8" long. Some grades may not tolerate side loading through misalignment to the socket screw.

Centek uses a high quality tough chrome vanadium hex key that gives good torque transmission and excellent life of tooling.

Example - typical UK Supplier

Draper Expert CR-V 6mm A/F Key Pt. No. GEE-15323K
Centek supplier: J & L Industrial,
Wednesbury, West Midlands,
WS10 7WP Tel: 0800 66 33 55



Products / suppliers are given below in good faith as a form of assistance and example. Ultimate choice will be purchasers’ responsibility.