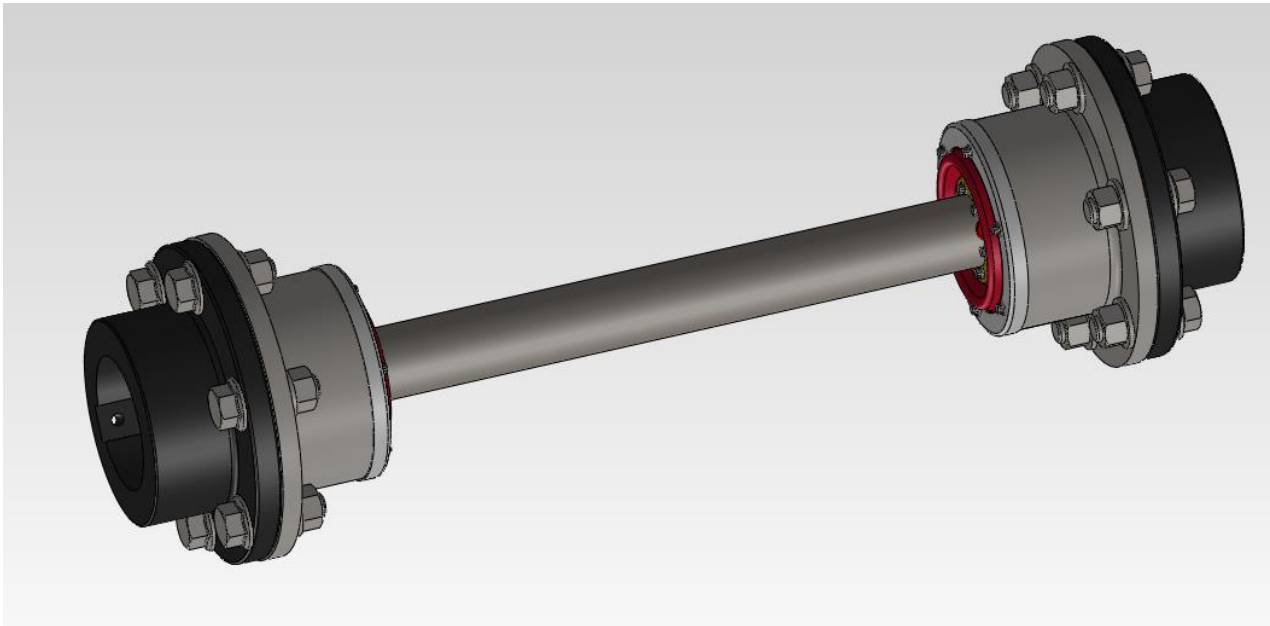


TCAE – ‘E’ SERIES (MODEL E-1 to E-5) RECOMMENDED INSTALLATION PROCEDURE



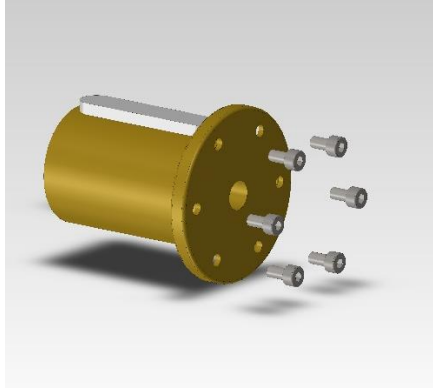
The TCAE-E series coupling is produced to allow fitment with a range of shaft sizes (for each series) with customer applicable length requirements

The following table details the appropriate shaft diameters for each coupling series::

TCAE-E Model	TABLE SHOWING MATING SHAFT DIAMETER TO BE USED:
E-1	30 mm
E-2	40 mm
E-3	50 mm
E-4	55 mm
E-5	60 mm

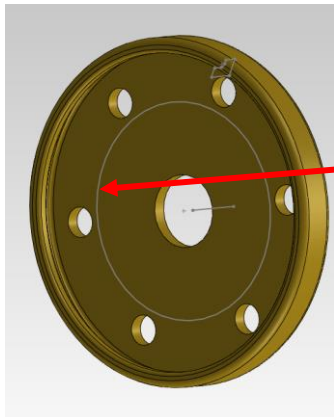
FITMENT OF SHAFT PROCEDURE

1. The E series couplings are supplied packaged together as a pair of individual couplings – with or without flange hubs as required.
2. Check for any damage to the outer box. Report issues to Thompson Couplings Ltd accordingly.
3. Carefully remove the outer plastic wrap from the couplings and keep aside.
4. REMOVE the 2x pilot bored seal bosses with fasteners and keystone from the coupling by removing 6 x screws as shown below. These are prefitted hand tight from the factory for easy removal.



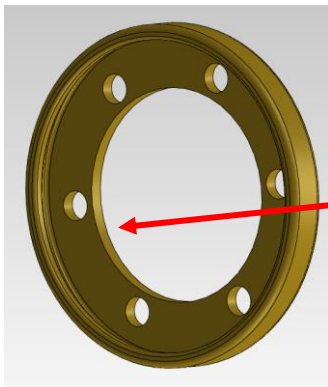
COVER THE COUPLING AGAIN WITH THE PLASTIC WRAP TO ENSURE CLEANLINESS WHILE WORKING ON THE PILOT BORED BUSHES.

1. Machine the Pilot Bored Seal Boss to remove the round bush section only as shown below



Machine the round bush section away to leave the Seal Boss as shown here

2. Then machine the inner bore to the required shaft diameter with an appropriate INTERFERENCE Fit such as P7/h6 as shown below:

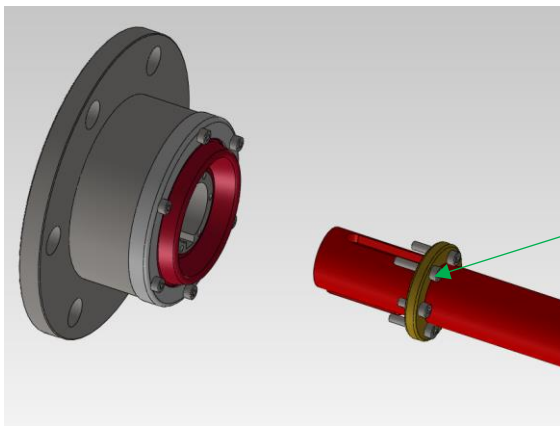


Machine the Inner Bore with an **INTERFERENCE fit P7/h6** to form a Locking Ring on the shaft

3. Determine the length of connecting shaft required and cut to length.
4. Machine appropriate keyslots in each end of the shaft with sizes according to the table below for British Std metric rectangular keys BS4235 - 1972

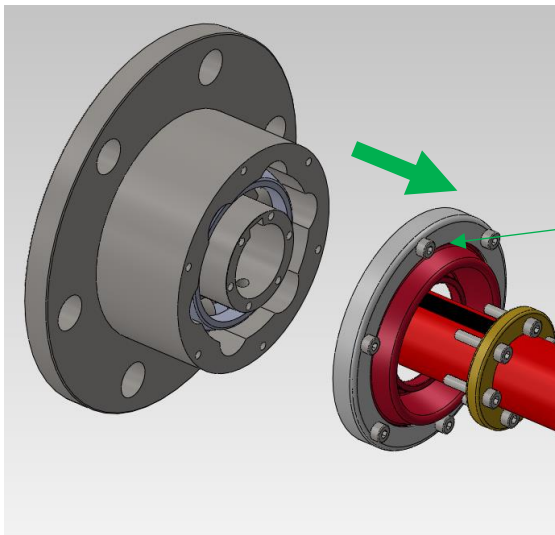
MODEL TCAE-E	SHAFT DIA.	Key size mm	Slot width (N9)	Slot depth +0.2/0	Length
E-1	30mm	8 x 7	8 +0/-0.036	4	40mm
E-2	40mm	12 x 8	12 +0/-0.043	5	60 mm
E-3	50mm	14 x 9	14 +0/-0.043	5.5	60 mm
E-4	55mm	16 x 10	16 +0/-0.043	6	70 mm
E-5	60mm	18 x 11	18 +0/-0.043	7	80 mm

5. Press the machined Seal Boss (Locking Ring) from section 2 above onto the shaft using an appropriate tool.



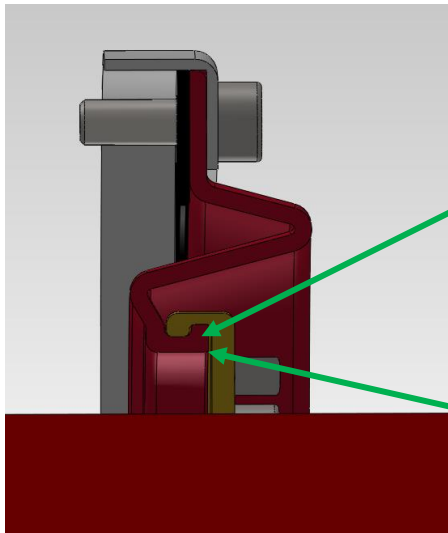
Press Seal clamp
(Locking Ring)
onto shaft

6. Take one half coupling assembly and remove the protective film.
7. Undo the 6x outer seal screws and slide the rubber seal, clamp plate and backing plate forward



Undo 6x outer
seal screws

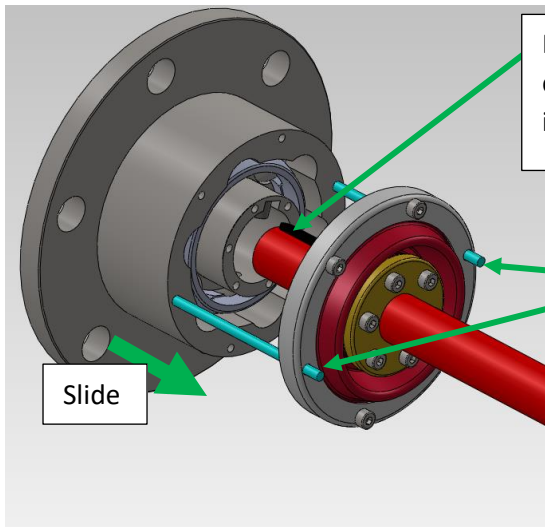
8. Apply a smear of grease around the rubber lip and then ensure to clip the inner lip under the seal boss (Locking Ring)



Apply a smear of grease around the rubber seal lip to allow it to slide easily

ENSURE inner lip of the rubber seal is secured under the seal boss (locking ring) as shown

9. Fit the main coupling key into the shaft and slide the coupling half on, lining up the key with the keyway. Also fit 2x dowel pins or similar into 2 of the holes in the coupling outer ring and line up with the holes in the front seal clamp assembly

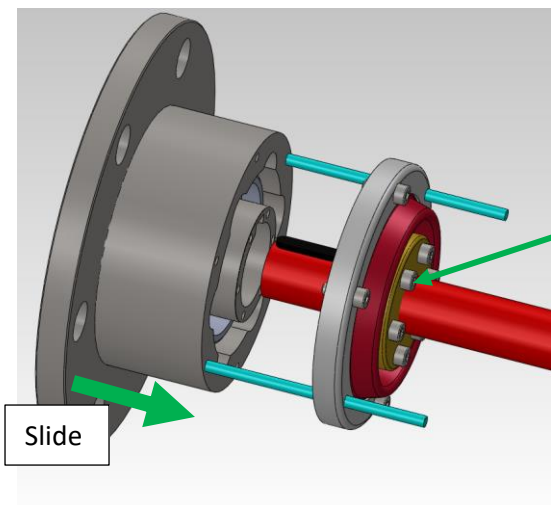


Fit main coupling key into shaft

Fit 2 x dowel pins into coupling holes and locate with the front seal clamp holes.

Slide

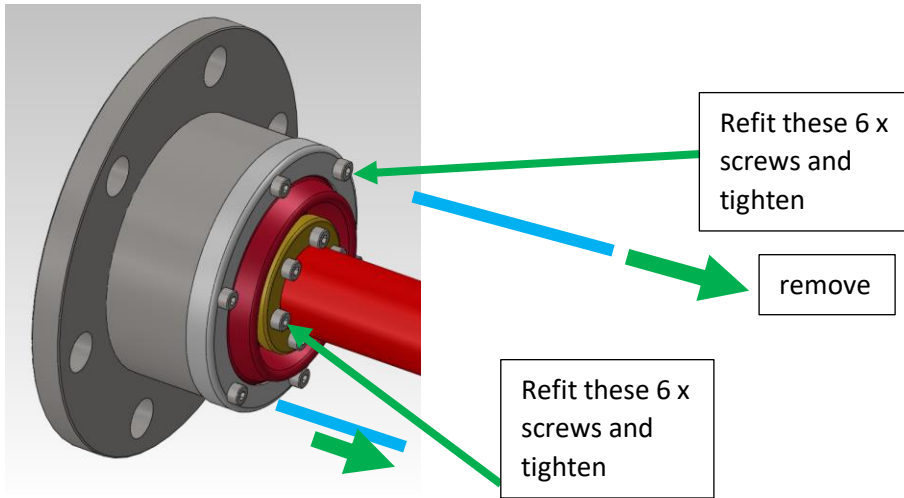
10. Also apply a smear of BLUE MAXX sealant around the shaft here to seal against grease leakage



Apply Blue Maxx sealant around shaft to seal against grease leakage

Slide

11. Finally remove the 2 x dowel pins and refit the 6x outer seal screws and 6x inner screws to the bush and tighten to the torques shown below



12. Fit the rear cover to the groove in the coupling half ensuring its fitting neatly and squarely.
 13. Fit the required flange hub with appropriate hex bolts and nuts.
 14. Torque all screws & bolts to the specified rating for the coupling as listed below:

MODEL TCAE-S -*	HEX BOLT SIZE	Torque Nm (lb.ft)	Inner and Outer Seal screws	Torque Nm (lb.ft)
1	6 x M14 grade 8.8	120 (90)	INNER – 6 x M4 SHCS OUTER – 6 x M4 SHCS	3 (2)
2	6 x M14 grade 8.8	120 (90)	INNER – 6 x M4 SHCS OUTER – 6 x M4 SHCS	3 (2)
3	6 x M16 grade 8.8	190 (140)	INNER – 6 x M4 SHCS OUTER – 6 x M6 SHCS	3 (2) 6 (4)
4	6 x M16 grade 8.8	190 (140)	INNER – 6 x M4 SHCS OUTER – 6 x M6 SHCS	3 (2) 6 (4)
5	6 x M20 grade 8.8	370 (270)	INNER – 6 x M4 SHCS OUTER – 6 x M6 SHCS	3 (2) 6 (4)

15. Repeat above procedure with the second coupling for the opposite end of the driveshaft.