

NOVA COMET MINI LATHE GAP BED ACCESSORY ASSEMBLY & INSTALLATION INSTRUCTIONS



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Weight: 6.370 Kgs Box: 0.0074m3

For safety reasons please carefully read and understand these instructions

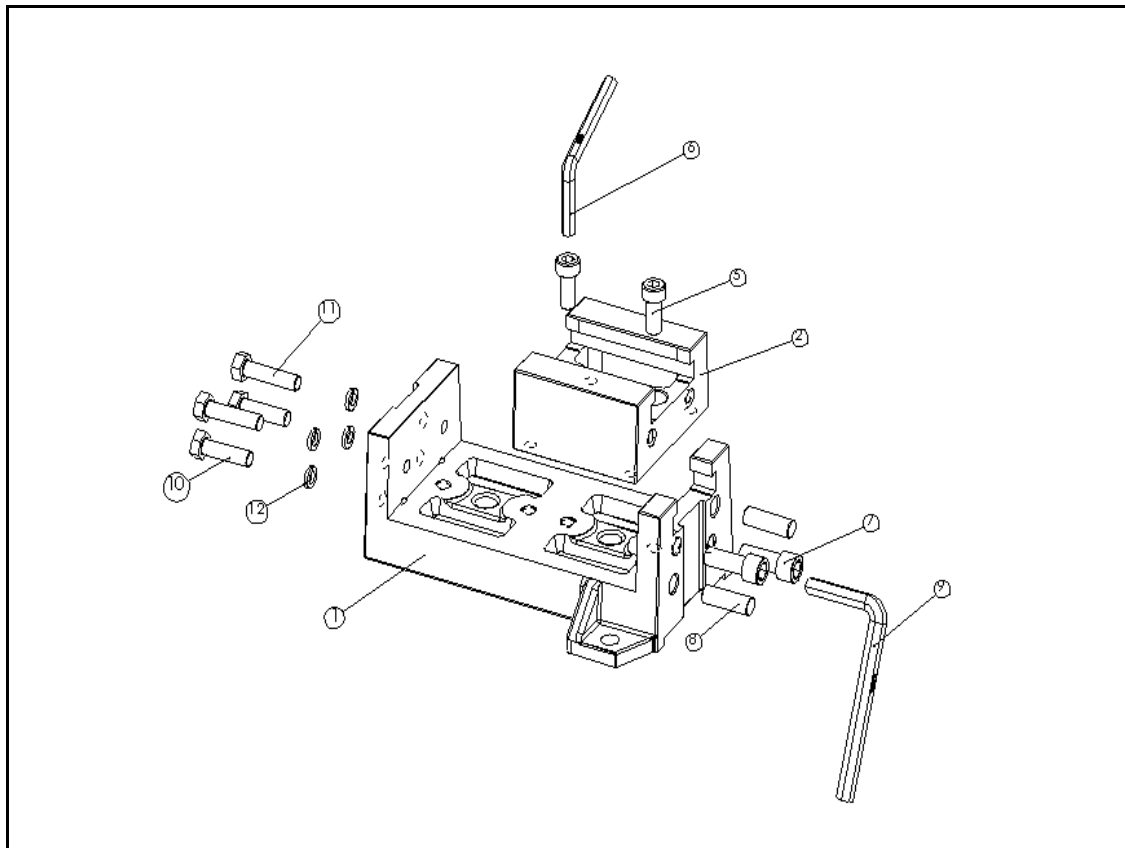
The Gap Bed is designed to fit and only be used with the Nova Comet Mini Lathe. Use of this accessory on other lathes could result in malfunction and risk serious injury. If you are unsure of the application of this accessory contact the technical manager of Teknatool International or your reseller.

PARTS LIST

Part	Description	No.
1.	Gap Bed Casting (Part No. 29007)	1
2.	Gap Bed Insert Casting (Part No. 29008)	1
3.	Instruction Sheet (Part No. 29010)	1
4.	Gap Bed Fastening Kit (Part No. 29011):	1

GAP BED FASTENING KIT (PART NO. 29011)

Part	Description	No.
5.	M10 Cap Screws (to fix the Insert Casting to Gap Bed Casting)	2
6.	M8 Allen Key (to use on 10mm Cap Screws)	1
7.	M12 X30mm Cap Screws (to join Comet Bed to Gap Bed Casting)	2
8.	M12x30mm Dowel Pins (to join Comet Bed to Gap Bed Casting)	2
9.	M10 Allen Key (to use on M12 Cap Screws)	1
10.	M10 x 35mm Cap screw (to attach Comet Headstock to Gap Bed)	2
11.	M10 x 40mm Cap screw (to attach Comet Headstock to Gap Bed)	2
12.	M10 Spring Washers (to use with M10 Bolts above)	4





FITTING PROCEDURE:

Refer to the illustrations overleaf

1. Remove Comet off stand/bench. Slide off the tailstock and toolslide units.
2. Remove Comet Headstock by undoing the M10 cap screws within the headstock cavity. Place the long end of the 8mm allen key into the cap screw head and use a pipe extension or a spanner to use as leverage on the short end to do/undo the cap screws. These cap screws can then be stored or discarded (not required for Gap Bed assembly).
3. Make sure the mating surfaces of the Gap Bed and the Comet Bed are clean. If required wipe off the protective sealer on Gap Bed and insert with Methylated Spirits or similar solvent.

Fit Gap Bed to Comet Bed

4. Fit M12 Dowel Pins to M12 Dowel Holes on the end of the Gap Bed (Face B Illustration 1). Tap down into place. One Dowel will bottom out in a blind hole. Tap down the other until it is flush with the inside face of the bed casting.
5. Stand Comet bed upright with headstock end upwards.
6. Place Gap Bed casting on top lining it up with Gap bed underneath. Tap together with a **wooden/rubber mallet. DO NOT USE A METAL HAMMER ON THE UNPROTECTED CAST IRON BED END**
7. After this process you may find you need re tap one of the dowel pins flush again with face of the Gap Casting.
8. Put M12 Cap Screws through (from Comet Bed end) and tighten with M10 Allen Key provided. Now have the Gap Bed Casting joined up with the Comet Bed.

Fit Insert to Gap Bed Casting

9. Then fit the Insert casting. The most common position for it is against the bed end of gap.
10. Make sure the mating surfaces are clean. Use the M10 Cap Screws in the two locating holes in the insert and tighten with M8 Allen Key provided. The insert should locate itself. May need to check bed faces at the join area – they should be flush. If not remove the insert and turn it 180 degrees and relock down. Check again.
11. Make sure the two mating surfaces are clean. Slide up headstock to Gap Bed Face (Face A Illustration 1.)
12. Fit M10 Spring Washers to the M10 cap screws.
13. Fit the two M10 x 35mm (shorter) cap screws in to the two bottom holes in Headstock. Smaller bolts are needed here because longer bolts would bottom out in the holes.
14. Fit the two M10 x 40mm (longer) cap screws in to the two top holes in Headstock.
15. Tighten all bolts finger tight.

Alignment of Headstock to Tailstock

16. Fit toolslide unit and tailstock to bed.
17. Either fit MT Centres to Headstock & Tailstock or use double ended MT "Acruline" alignment accessory.
18. Bring up Tailstock to Headstock with center points together.

Alignment Using MT Centres

19. Make sure the six feet of the lathe and gap bed are flush with the bench/stand surface.
20. Bring two center points together by lifting bed. (Do not move headstock – move the bed)
21. Block or hold bed up in place and then nip up the four-headstock bolts.
22. Re Check center alignment. If OK do final tightening.
23. Re Check center alignment again. If centres are out repeat alignment process.

Alignment Using Double Ended "Acruline" MT Accessory

1. Get the Headstock mounting bolts to finger tight to allow movement of Headstock.
2. On a flat surface support bed up near headstock let headstock hang completely down on bolts.
3. Fit Acruline tool into Morse taper of headstock (check for dirt and burrs) with the undrilled end of the Acruline in the headstock spindle.
4. Fit the simple live centre into tailstock quill Morse taper and wind out quill to maximum. Lock up quill with quill lock knob.
5. Slide the tailstock along the bed until the point on the simple live centre is engaged in the internal drilled centre hole in the end of the Acruline.
6. Lock tailstock up onto bed carefully without putting any pressure on bed either sideways or up and down. You'll notice the bed rising against the headstock. This is normal.
7. Tighten up headstock bolts evenly.
8. Remove Acruline tool and fit 2 types of centres into both Morse tapers and check for alignment.
9. If not still on centre then repeat complete procedure.
10. If centres are quite close, but not dead centre if it is possible to make minute (small) adjustments by tapping bed by headstock to bring points together, (you may have to loosen headstock bolts slightly until correct then re-tighten).



Illustration 1. Gap Bed Drawing

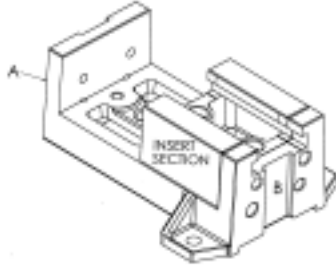


Illustration 2 Position Of Dowels in Gap bed Casting

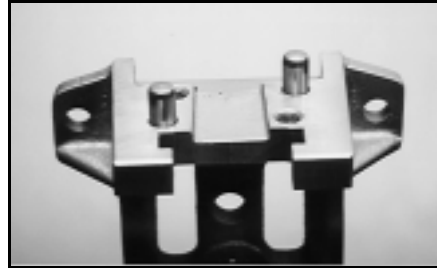


Illustration 3 Joining the Comet Bed and Gap Bed together using M12 cap screws and M10 Allen key.



Illustration 4 Gap bed in place on Comet Lathe.

