9N-10K Back-Gears interchange:

On The top oiler Headstock, there is only a square head set screw, to secure the right back gear shaft bushing. There is not a spring or plunger to adjust the resistance, to rotating the back gear bushing.

The top oilier Headstock has a spring loaded plug under the shift handle, on the left side of the head stock. Many times these are not noticed until you remove the back gear assembly and get lost. This plunger and spring are what gives the back gear the resistance, so the back gears do not disengage while running.

On the side oiler the right bushing is taper pinned to the back gear shaft, and the top oilier version is not. In the side oilier version the right back gear shaft bushing rotates, with the back gear shaft. The spring loaded plug under the right square head set screw, is what is used to give an adjustable resistance,

to keep the back gears from disengaging.

The back gears are the same, although the side oilier back gear is about 3/16 shorter.

This was done so the right side bushing could be made longer.

and this added length is were the taper pin is you have to knock out to remover the back gear assembly on a side oilier head stock.

I also think the side oilier busing on the right side is larger in diameter than the top oilier version, as this was needed to secure the taper pin in the bushing.

The main problem with the top oilier Headstock is number one, the soft spindle,

and the fact that you cant adjust the amount of resistance to disengage the back gears,

as its fixed by the factory plunger under the shift handle.

You will also see that the shift handle itself is different,

in that it has a flange that rides on the spring loaded plunger,

seated in the left back gear support part of the head stock casting.

This is a blind hole housing the short spring and very short rounded head plug,

that rides against the flange on the back gear shift handle.

Note that the 10K back gear is different yet. SB shortened it again, to make room for the taper pin bushing in the new enclosed head stock casting, that had just a little less room than the open 9 inch casting. Dennis Turk

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