

# The ConMet Connection

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## Part II of a Three Part Series on Types of Hub Assemblies

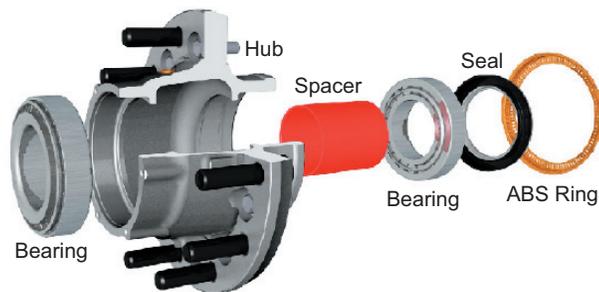
# Hubs with Pre-adjusted Bearings

Part I of ConMet Connection's series on wheel hub assemblies profiled hubs with manually adjusted bearings in the Fall 2005 issue. Part II of the series will be devoted to hubs with pre-adjusted bearings.

ConMet revolutionized the hub assembly market when in 1995 it introduced PreSet®, a hub assembly with factory pre-adjusted bearings. PreSet hub assemblies utilize close tolerance bearings and a bearing spacer to simplify installation, improve wheel seal and bearing life and reduce maintenance requirements – resulting in improved overall vehicle performance and lower life cycle cost.

ConMet achieves optimum bearing adjustment by machining the bearing cup seat-to-seat and bearing bores to exacting tolerances in a controlled environment. A precision machined bearing spacer establishes a predetermined distance between the inner and outer bearing cones. This level of accuracy and repeatability is nearly impossible to achieve in a shop environment using a manual bearing adjustment method.

Bearing end-play, ABS tone ring run-out and wheel seal run-out are checked on 100% of the PreSet wheel hub assemblies coming off the assembly line with specially designed gauging. This process helps to ensure reliability, long life and maximum performance.



Components of a PreSet hub assembly.

Since all adjustments are performed under strict conditions at the factory, there's little risk of misalignment or damaged components during hub installation – a major cause of premature seal failure. The complete self-piloting hub assembly is quickly and easily installed on to the spindle and then the retaining nut is torqued to 300 ft-lbs. The trouble-free wheel hub system is complete once lubricant is added and a hubcap is installed.

PreSet's half-stand series bearings provide closer tolerances when compared to standard series bearings, which are used on most manually adjusted wheel ends. A premium two-piece wheel seal keeps wheel end lubricant in while excluding contaminants.



PreSet hub assembly.

PreSet hubs require periodic inspections in conjunction with brake or tire service or every 12 months. Visual inspections include looking for leakage indicators such as oil on or around the hub cap, around the hub, brake hardware and brake shoes as well as checking for proper lubricant fill level.

Complete servicing is recommended at or near 500,000 miles for line-haul applications. PreSet hubs can be fully serviced in the field using readily available parts. Contact your truck or trailer dealer for availability of individual components or rebuild kits.

A comparison between hubs with manually adjusted bearings and hubs with pre-adjusted bearings is featured below:

Hubs with Manually Adjusted Bearings	Hubs with Pre-Adjusted Bearings
Requires individual components to be assembled	Complete self-piloting assembly
Least accurate adjustment	Bearing end-play is factory pre-set for improved accuracy
Adjustment subject to technician capabilities	Adjustment not subject to operator error
Labor intensive adjustment	Adjustment not required

### Next issue of the ConMet Connection: **Part III of Hub Assemblies - Unitized Hubs.**

**Correction:** In the last issue of the ConMet Connection, the images of the two single nut systems (Figures 3 and 4) were transposed. A corrected version of that issue can be found at [www.conmet.com](http://www.conmet.com). We're sorry for any inconvenience this may have caused.

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