The patented axle structure offers improved durability and easier upgrades or repairs of used hubs, fitting most brand hubs.

CH. JI

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Introduction to the Patent: Universal Hub Axle Set

Model Numbers: 2054R-CB / 2054R-IB

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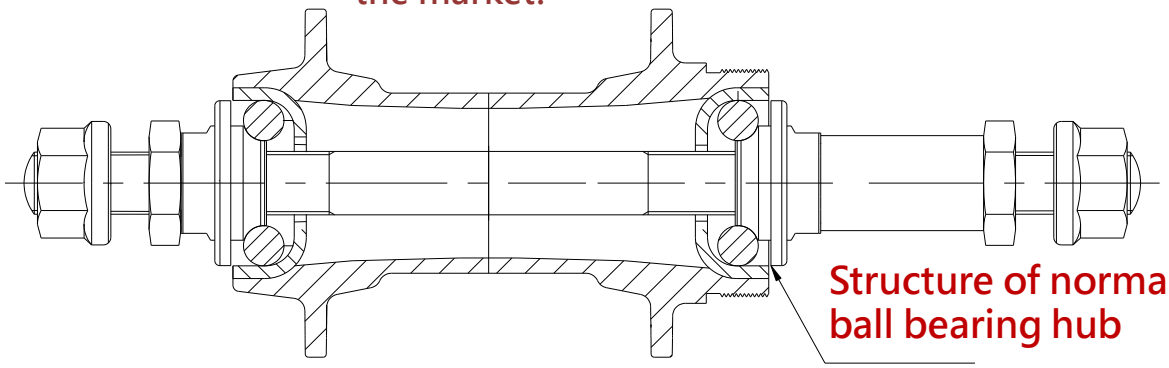
Benefits of universal fit axle sets ：

1. Upgrade to Ind. Bearing hub from retainer ball bearing hub.
2. Suit to substitute/maintain/upgrade most types hub of the market.

2354R-CB

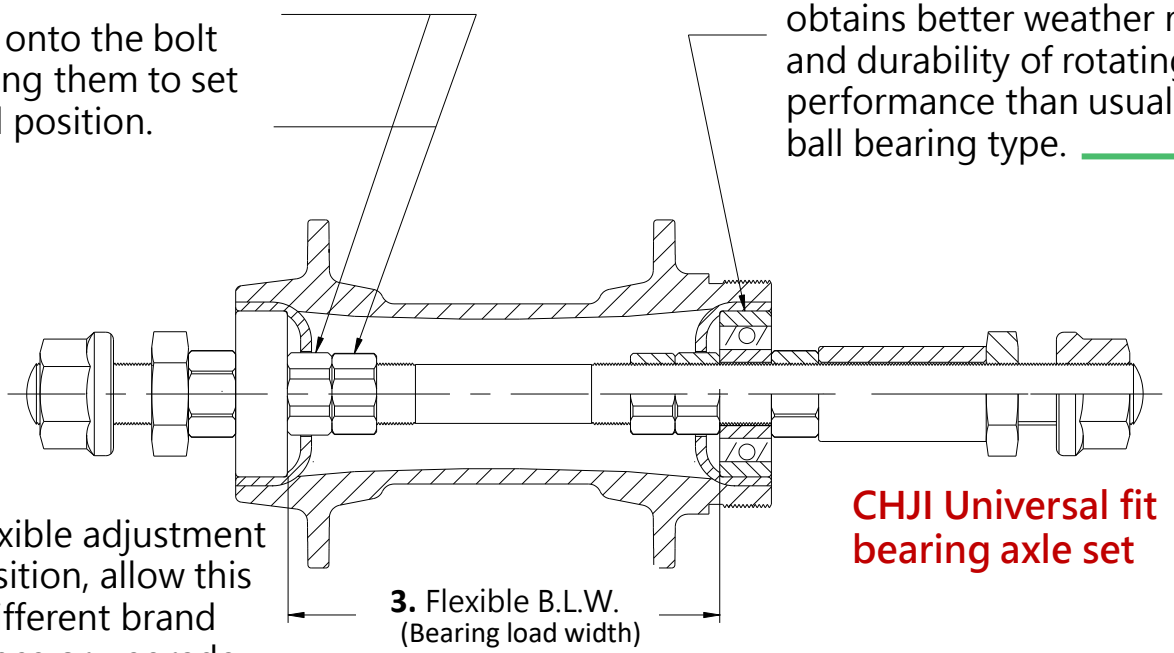
P1



Structure of normal retainer ball bearing hub

1. This axle set fits w/Ind. Bearing, obtains better weather resistance and durability of rotating performance than usual retainer ball bearing type.

2. By 2 x adj. nuts roll onto the bolt axle and anti-rotating them to set up the bearing load position.

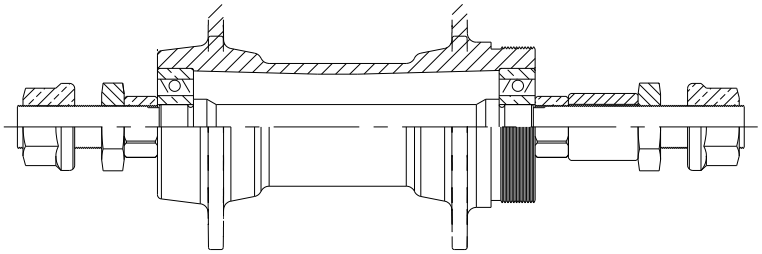


CHJI Universal fit bearing axle set

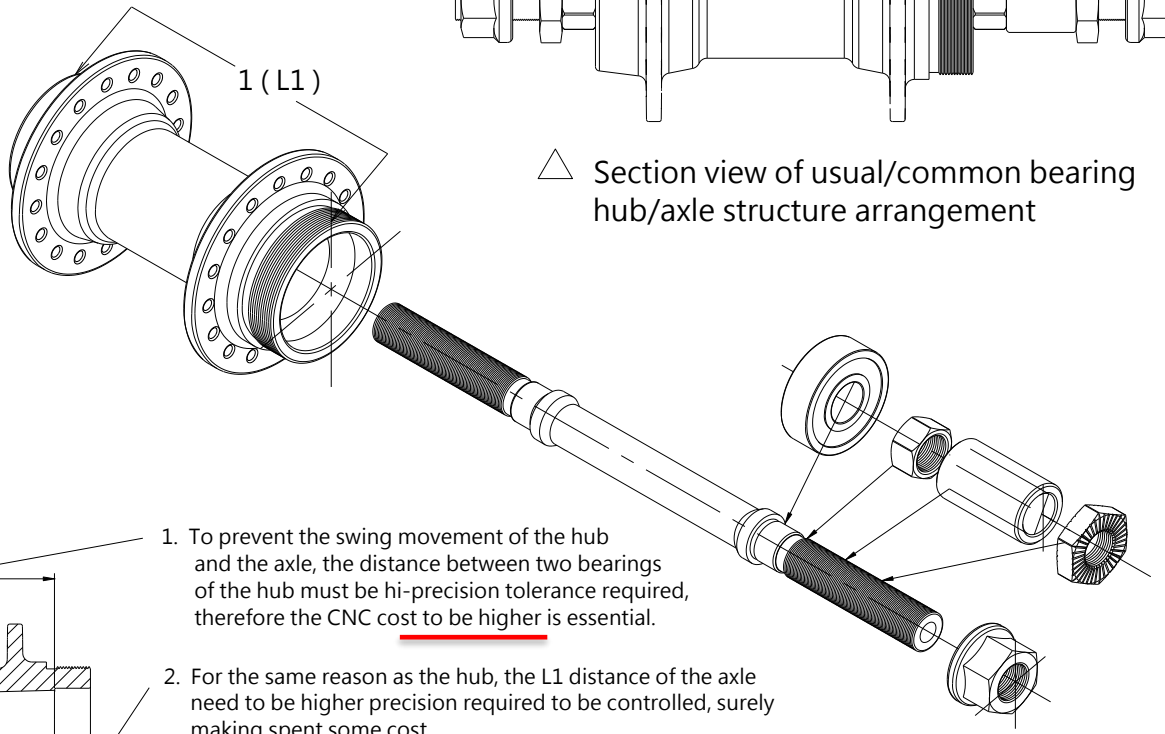
3. The specialty of flexible adjustment of bearing load position, allow this axle set fits most different brand hubs for maintenance or upgrade.

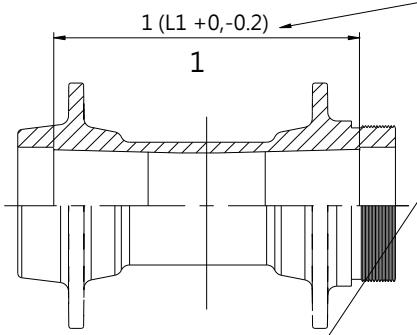
The features of usual common industrial-bearing hub & axle.

P2



△ Section view of usual/common bearing hub/axle structure arrangement



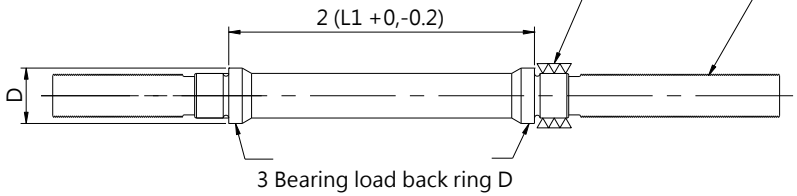


1. To prevent the swing movement of the hub and the axle, the distance between two bearings of the hub must be hi-precision tolerance required, therefore the CNC cost to be higher is essential.

2. For the same reason as the hub, the L1 distance of the axle need to be higher precision required to be controlled, surely making spent some cost.

3. The common bearing axle needs to grind two bearings load location and 2 x bearing stage D spent bigger diameter axle material. Both of them increase the cost and labor spent.

4. The usual/common hub axle not only has higher costs for the above reasons, the axle components between each different supplier are unable to substitute to each other. It leads to trouble with after-service and hub repair.



◁ Usual common Ind.-bearing hub axle structure.

The benefits of 2354R-IB than the usual common industrial-bearing hub & axle

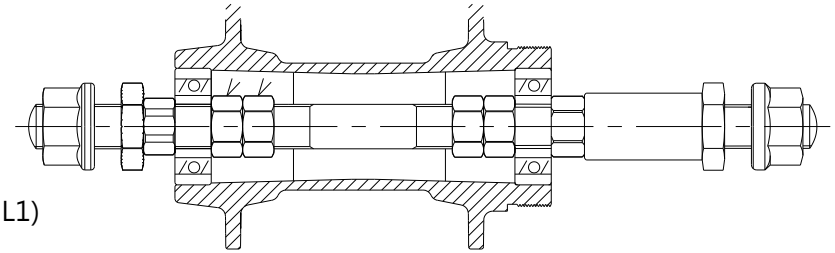
1. Cost down from less tolerance limits of bearing location width both on the hub & axle.

2. Cost down from needless Grind-bearing load areas on the axle.

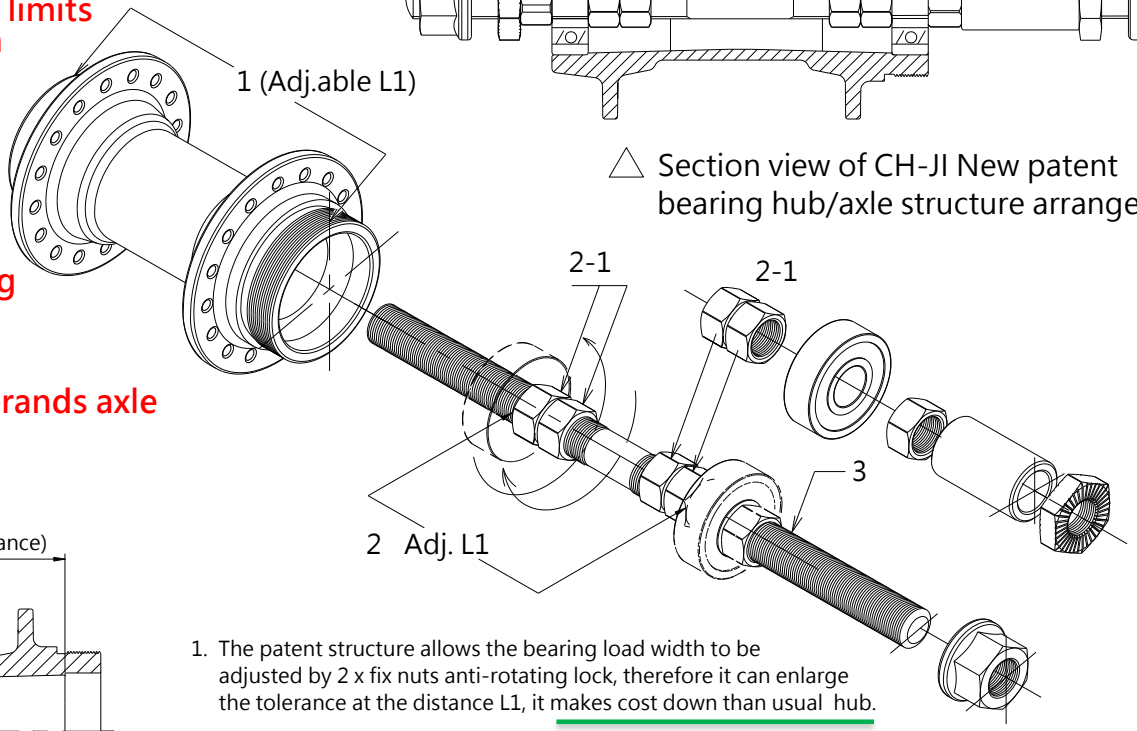
3. Save both material and making process of the axle.

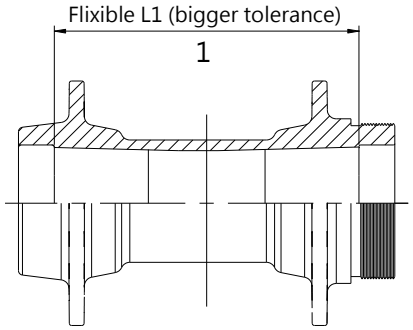
4. Allow replace most different brands axle set of the market.

P3



△ Section view of CH-JI New patent bearing hub/axle structure arrangement



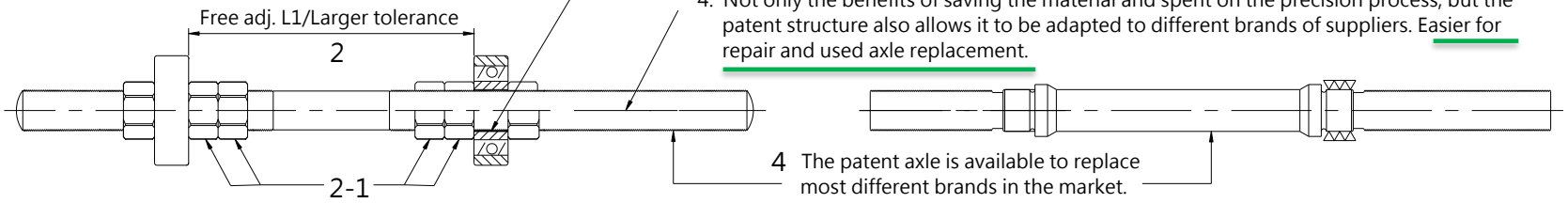


1. The patent structure allows the bearing load width to be adjusted by 2 x fix nuts anti-rotating lock, therefore it can enlarge the tolerance at the distance L1, it makes cost down than usual hub.

2. With 2 x fix nuts (2-1) to adjust the bearing load width freely, and the tolerance of the bearing location width can be enlarged. It also puts some costs down to the axle.

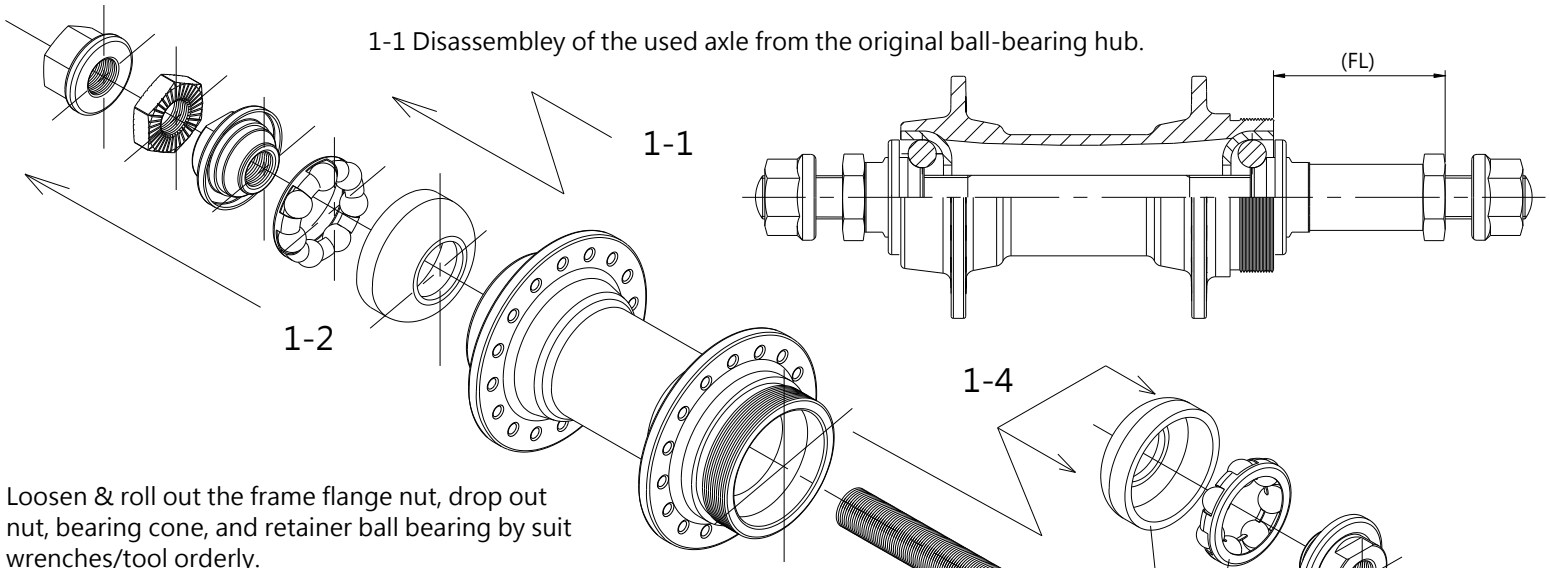
3. The patent allows industrial-bearing load onto the bolt axle directly, thus saving grind cost from the making process. Also saves the cost of axle material from needless bearing stage ring D. (shown as above drawing/usual common Ind.-bearing hub axle)

4. Not only the benefits of saving the material and spent on the precision process, but the patent structure also allows it to be adapted to different brands of suppliers. Easier for repair and used axle replacement.



P4

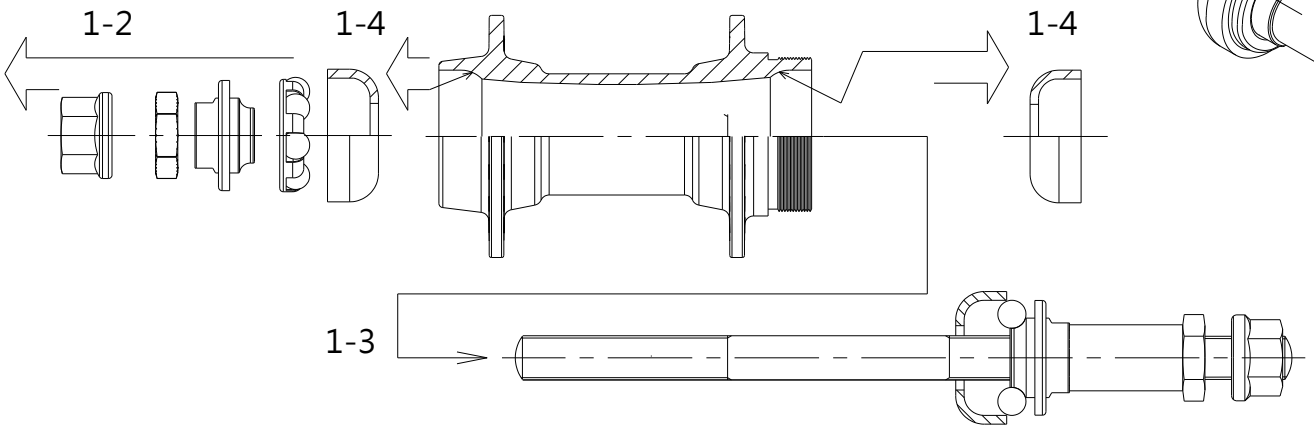
1-1 Disassembley of the used axle from the original ball-bearing hub.



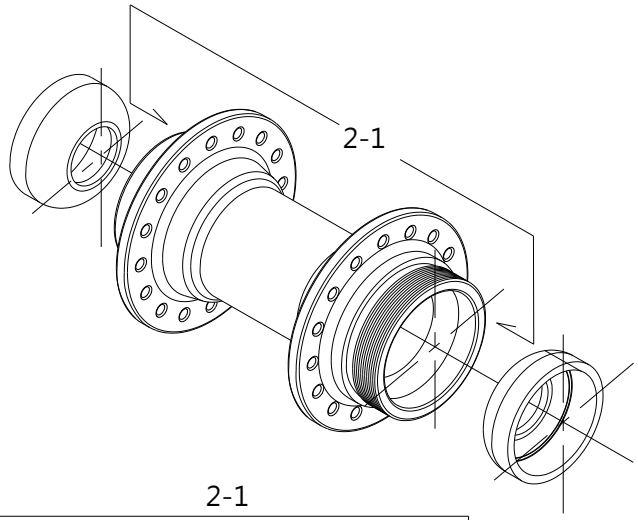
1-2 Loosen & roll out the frame flange nut, drop out nut, bearing cone, and retainer ball bearing by suit wrenches/tool orderly.

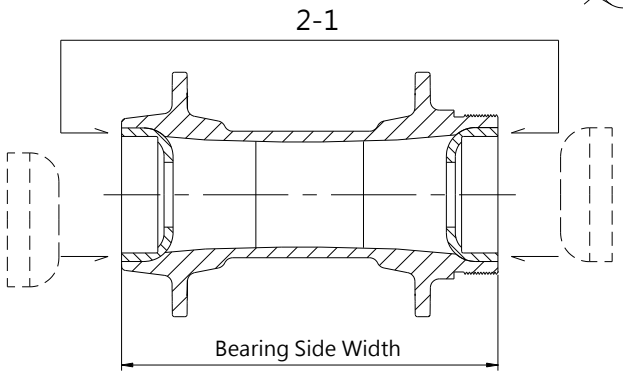
1-3 Draw out the axle from the freewheel side.

1-4 The bearing cup on both ends of the hub needs all be removed by a suited tool.



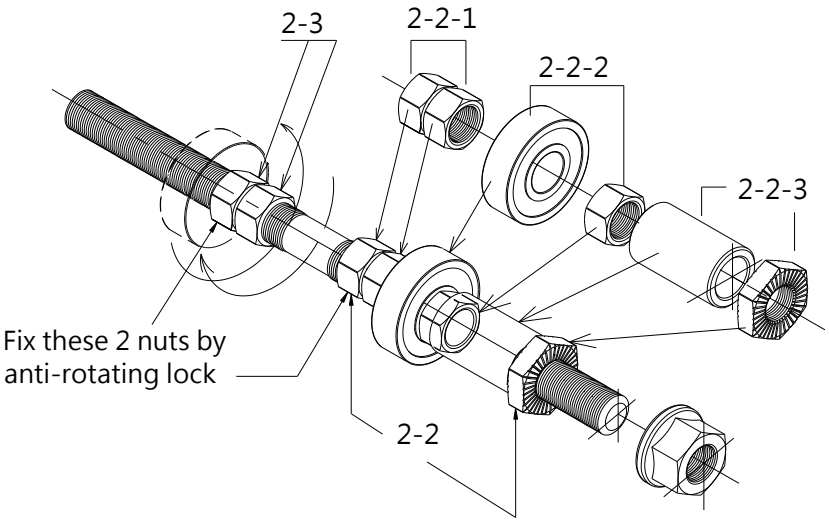
P5



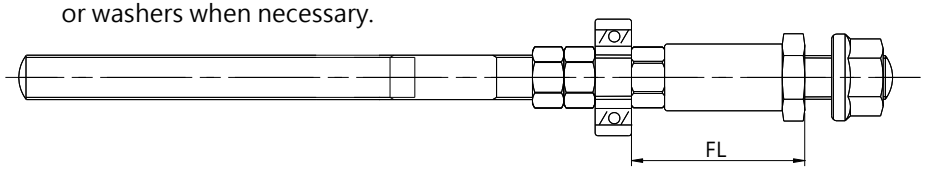


2-1 Insert 2 x JC-bearing cups to both sides of the hub with a suit tool.

2-3 Measure the bearing side width from the hub, plus around 0.3mm to spare an anti-fix bearing gap. Then tighten up these two bearing back nuts in anti-rotating lock.



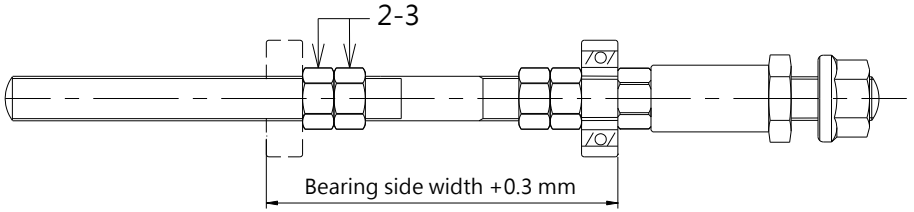
2-2 Set up the arrangement of freewheel side orderly, reference (FL) the original width from the hub side. piled up with suit thickness spacer or washers when necessary.



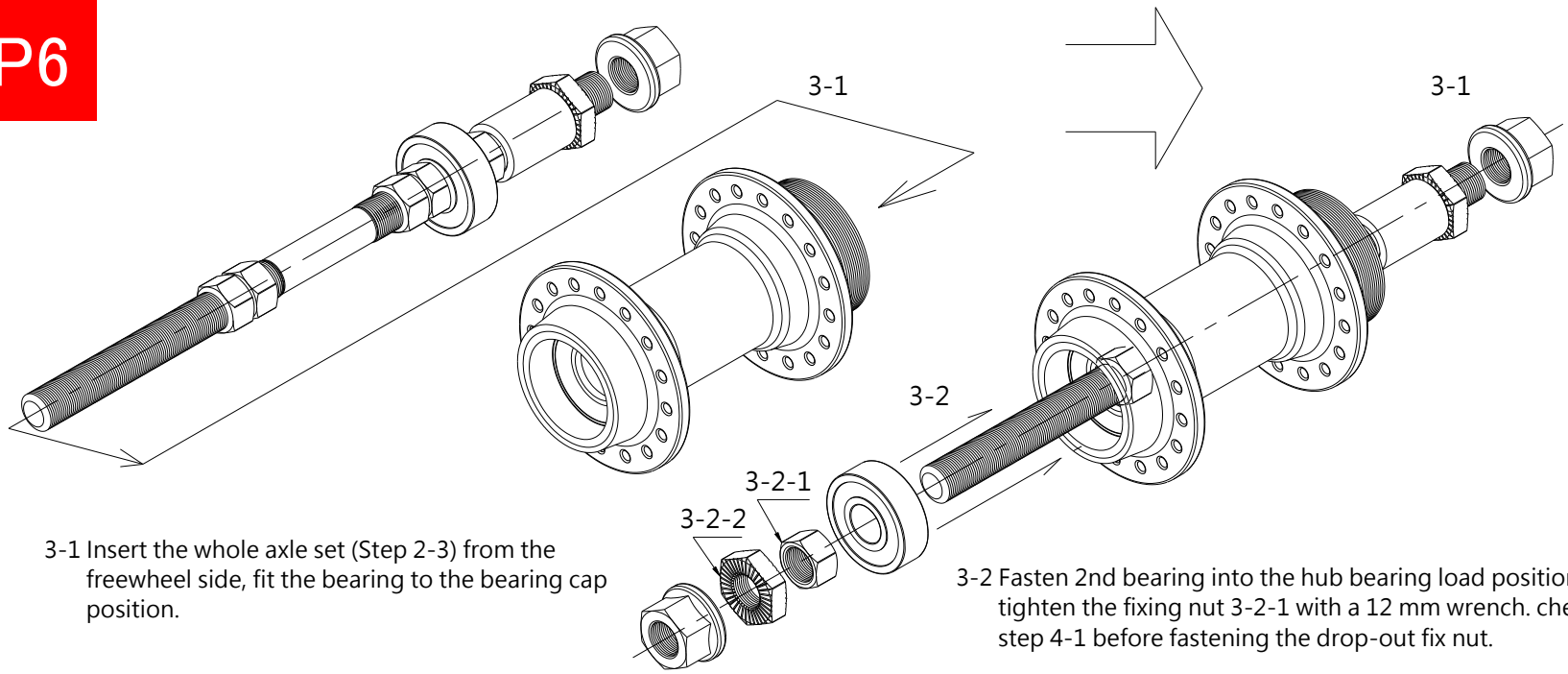
2-2-1 Measure the bearing location as the original hub cap position, fix the bearing back load by 2 x nuts in anti-rotating lock.

2-2-2 Insert the bearing lean onto the bearing back nut. then fix tight with nut by 12 mm hex wrench.

2-2-3 Piled the property width spacer, then tightened it with the outer hex lock nut. Be sure the extending width fits the compatible freewheel.

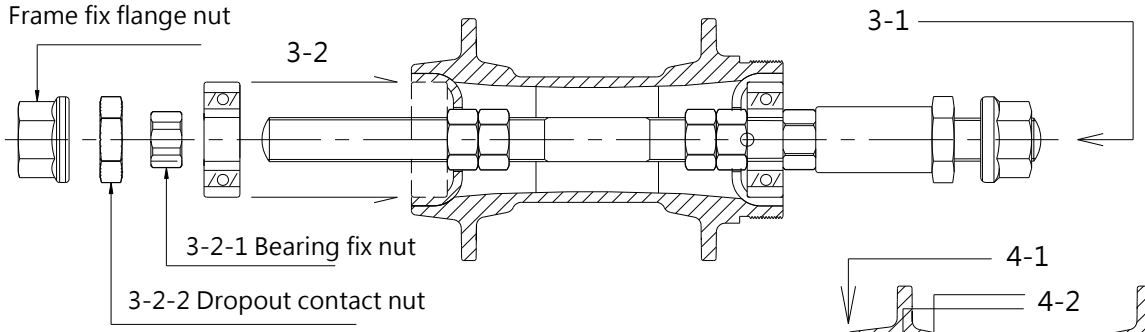


P6

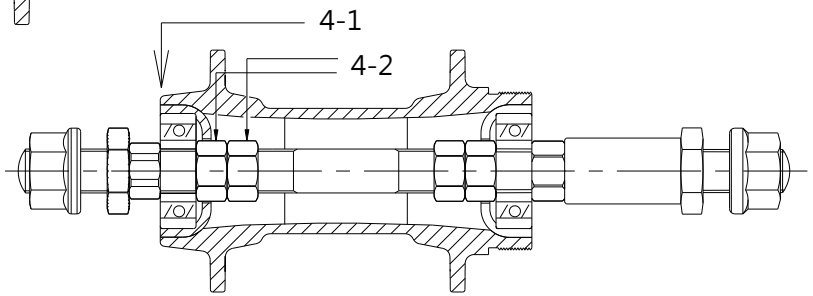


3-1 Insert the whole axle set (Step 2-3) from the freewheel side, fit the bearing to the bearing cap position.

3-2 Fasten 2nd bearing into the hub bearing load position, tighten the fixing nut 3-2-1 with a 12 mm wrench. check step 4-1 before fastening the drop-out fix nut.



4-2
Loosen these 2 x anti-rotating nuts to re-set up or adjust when if the bearing is too tight of smooth rotating, or a loosen gap between the hub and axle.



4-1 Make a final check while the axle is assembled before locking up the drop-out nut 3-2-2, check if the bearings load width fitd into the hub properly, adjust through 2 x back up fix nut of left side as shown of drawing. (You need to loosen the nut 3-2-1 and pull out the axle set from the freewheel side & back to step 2-3.)

P7

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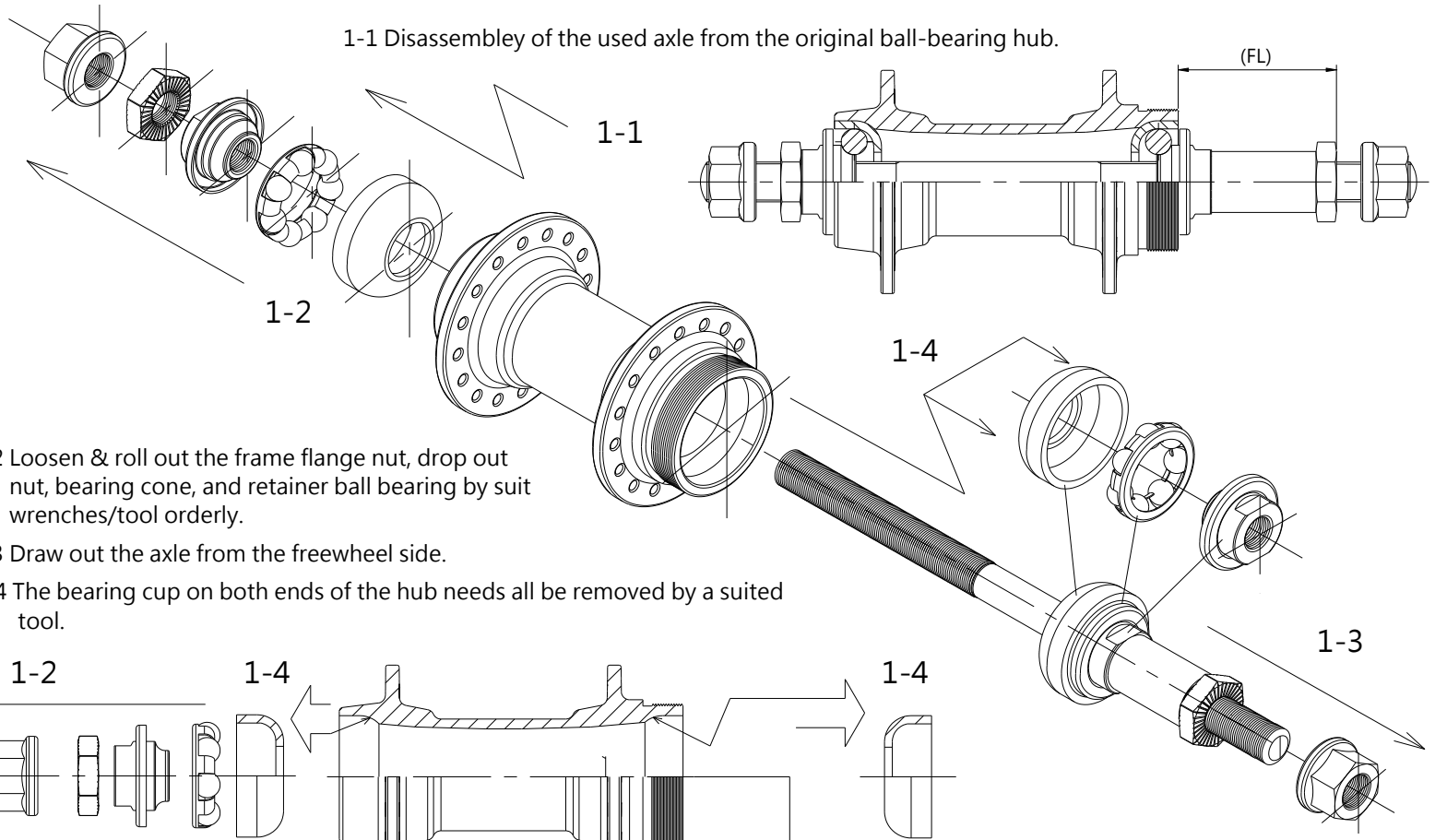

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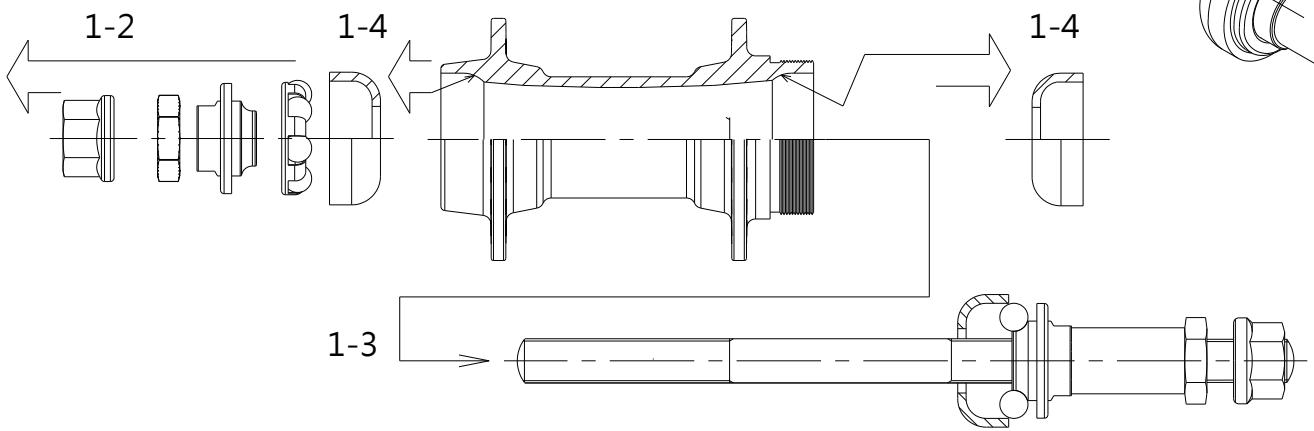
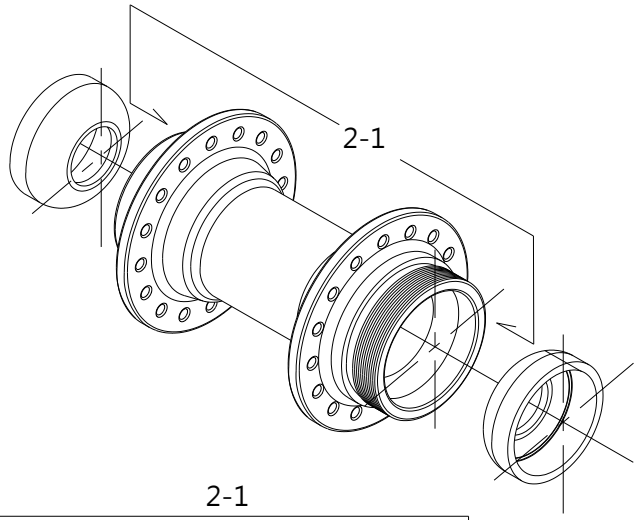
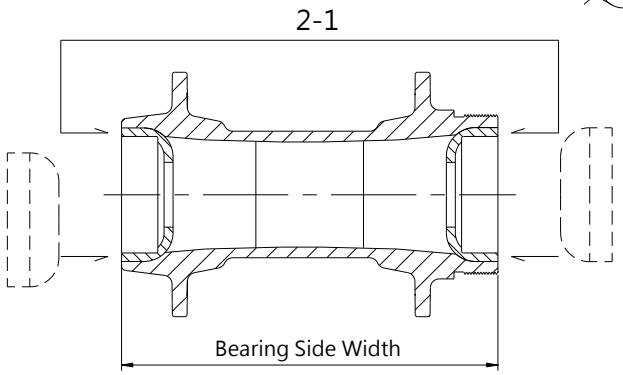


P8





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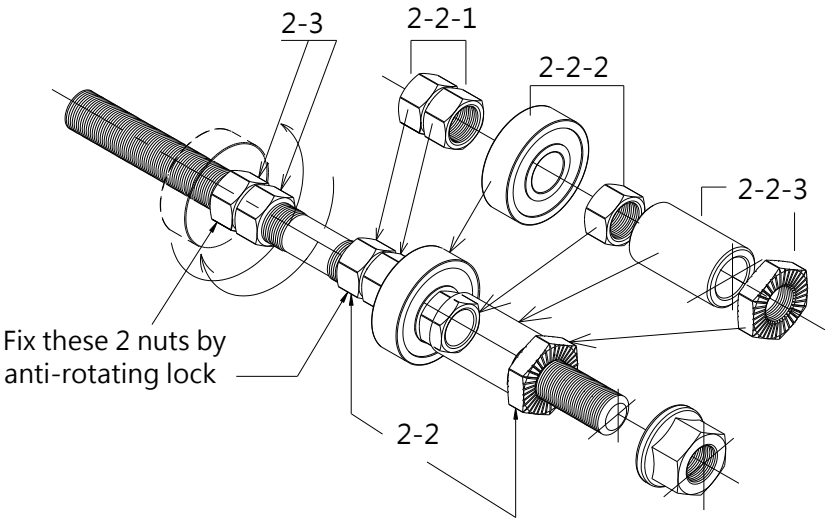

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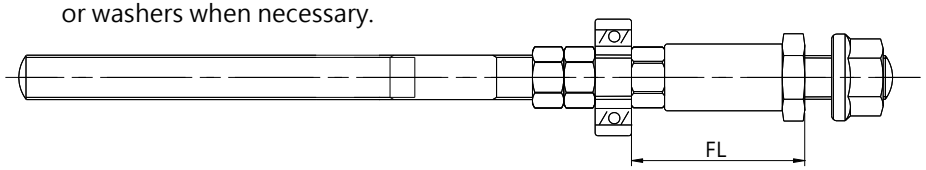

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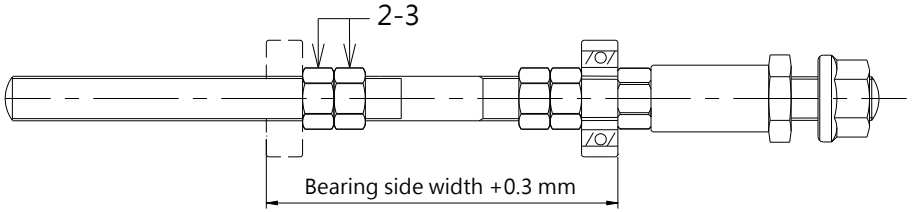

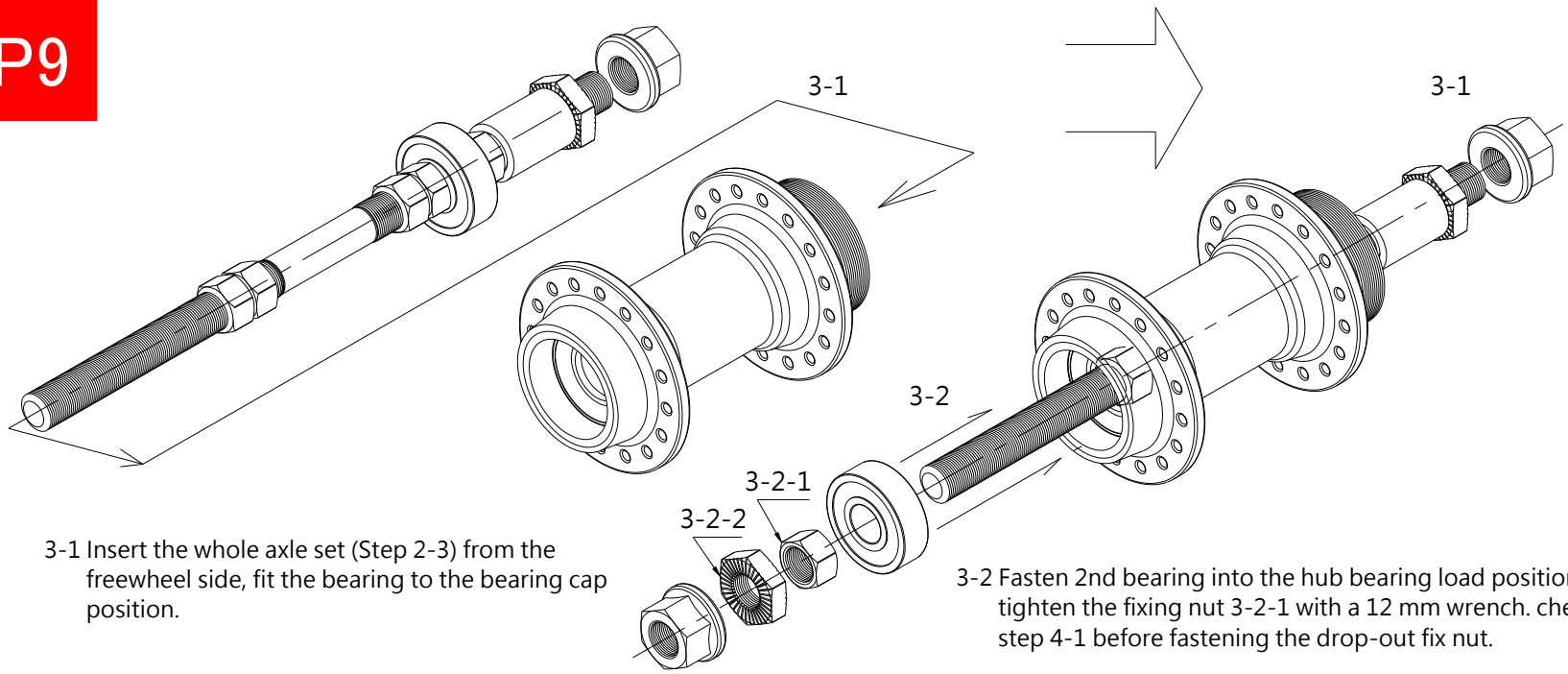

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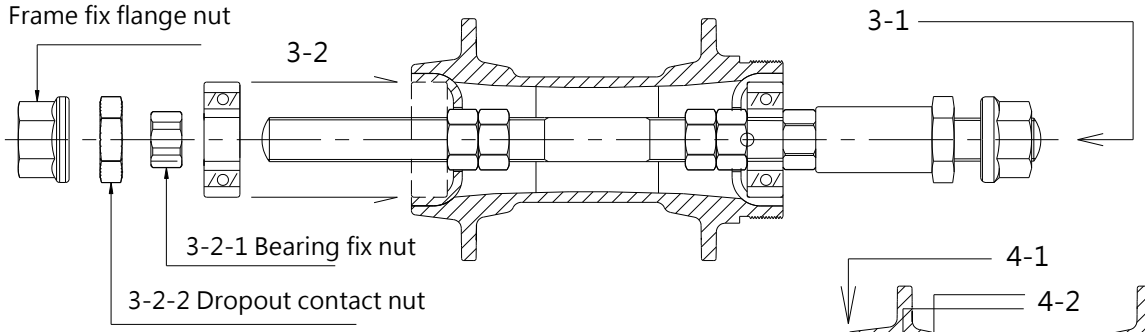

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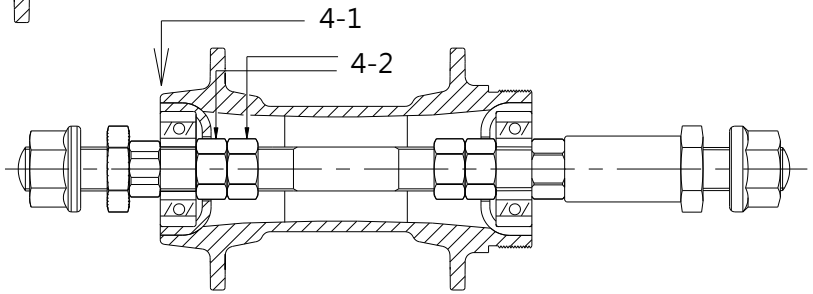

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A. Order information-**2054R-CB**

1. The hub is a retainer cap ball bearing adapted type.
2. Check w/our data that the cap outer diameter is matched..
3. Specify the free-wheel width. (Speed chain plate Qty)
4. O.L.D (Specify the thickness of the spacer, washer, and lock nut.)
5. Total length of the axle.
6. Other specify if necessary.

B. Order information-**2054R-IB**

1. The hub is an ind.-ball bearing adapted type.
2. Check that the retainer bearing cap outer diameter is matched.
3. Specify the free-wheel width. (Speed chain plate Qty)
4. O.L.D (Specify the thickness of the spacer, washer, and lock nut.)
5. Total length of the axle.
6. Other specify if necessary.

Feel free in contact us when if You have any questions.

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