

ISIS Bearing Replacement page 1

American Classic ISIS Bottom Bracket Bearing Replacement

All repairs should be performed by a Professional Bicycle Mechanic. All repairs done at your own risk.

Tools: Socket Set - round objects needed to remove and install bearings, old towel, hammer, small flathead screwdriver, small block of wood, and a bench vice.

Carefully remove the non drive side cup. This should easily slide off by hand.

Place the bottom bracket into a vice with the drive side cup facing up. Be sure to support the bearing cup's outer lip during this process. An old towel will help protect the cup from damage.

Using a hammer, carefully tap the bottom bracket axle out of the drive side bearing / cup. - see **Figure 1**.

Once the axle assembly is free of the bearing / cup, the bottom bracket should resemble. - see **Figure 2**.

Use a small flathead screwdriver or pin to carefully remove the locking on the drive side cup. This will allow access to the bearing. - see **Figure 3**.

113mm BB only - Once the locking on the drive side cup has been removed, gently remove the spacer ring. - see **Figure 4**.

Side by side comparison of a 113mm drive side cup vs. a 108mm drive side cup. - see **Figure 5**.

Bearing Removal:

Drive side - support the drive side cup over a vice. Make sure the vice is covered by an old towel to protect the cup. Select a round object from the socket set that is smaller in diameter than the bearing. The object should also be able to clear the stop in the cup. Place a block of wood on top of the round object. With a hammer, gently tap the bearing free. - see **Figure 6**.

Non Drive side - support the non drive side bearing on the vice. Make sure the vice is covered by an old towel to protect the axle. With a hammer gently tap the bearing free of the axle. - see **Figure 7**.

Part breakdown for a 113mm BB drive side cup. 108mm BB drive side cup DOES NOT have the silver spacer. - see **Figure 8**.



Figure 8



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7

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ISIS Bearing Replacement page 2

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Tools: Socket Set - round objects needed to remove and install bearings, old towel, hammer, small flathead screwdriver, small block of wood, and a bench vice.

Bearing Installation:

Carefully remove the non drive side cup. This should easily slide off by hand. Drive Side - Place the drive side cup onto a block of wood facing up. With a new bearing in hand, place it on top of the cup. Align the bearing for installation into the cup. Place a round object from the socket set on top of the bearing. **** Important **** This object should push only on the OUTSIDE bearing race. The object is to prevent force through the balls while press fitting the outside race into the cup. With a hammer, gently tap the bearing into the cup. - see **Figure 9 & 10**.

Drive Side Cup - for **113mm BB**, install the silver colored spacer ring and lockring. Drive Side Cup - for **108mm BB**, install the lockring.

Non Drive Side - Place the axle onto a block of wood. Split rings should be installed before proceeding. With a new bearing in hand, place it on top of the axle. Place the black spacer ring on top of the bearing. - see **Figure 11 & 12**.

Next, place a round object from the socket set on top of the black spacer. With a hammer, gently tap the bearing and spacer down onto the split rings. - see **Figure 13**.

Final Steps:

Drive Side - Install plastic sleeve into drive side cup. Make sure split rings are installed on the drive side of the axle. Next install the cup / bearing / black spacer ring / sleeve together on the axle assembly. - see **Figure 14**.

Using an item from the socket set, push against the black spacer ring which will in turn push down on the inner bearing race. - see **Figure 15**.

BE GENTLE. Too much pressure can damage the split rings. The crank arm will push the spacer and bearing squarely home onto the split rings if it is not already there.



Figure 9



Figure 10



Figure 11



Figure 12



Figure 13



Figure 14



Figure 15

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