INFO

GEN 2 Wheel Bearing Tool Instructions

Blue Print
ADC45502

For more technical information please visit: **partsfinder.bilsteingroup.com**

Ferdinand Bilstein GmbH + Co. KG
Wilhelmstr. 47 | 58256 Ennepetal | Germany | Tel. +49 2333 911-0 | www.bilsteingroup.com

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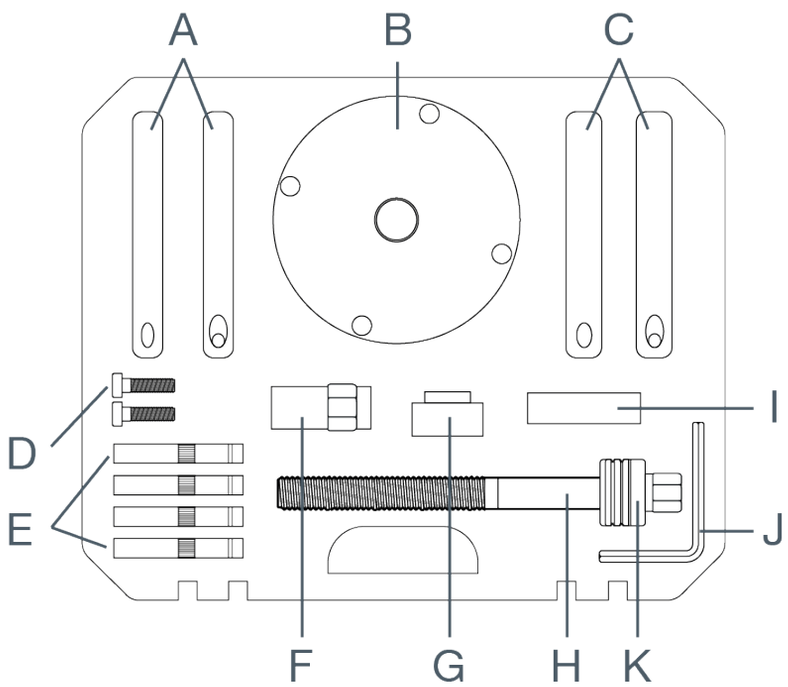
Installation of these bearings without the use of the correct special tools could result in detrimental damage to the bearing race surfaces. Generation 2 wheel bearings are supplied and fitted as a complete unit of bearing and integral mounting flange.
Due to this design, there is no direct access to the outer race and if the bearing is pressed into the housing by forcing the drive flange, the force will be applied to the outer race through the axial thrust ball bearings.
If pressed into place in this manner the load being applied to the inner race will cause damage to the bearing and premature failure.
At worst it risks catastrophic damage with the potential for serious injury should the outer race fracture.
By using clamshells and force plate this tool ensures that the loads of insertion are taken only on the outer race of the bearing.
This kit is designed to remove and replace the bearing/flange in situation on the vehicle.
Before commencing the bearing removal, be aware of the close proximity of the ABS sensor, as it can be damaged in the process.



Components

Ref	Description	Part No
A	Insertion Clamshells	5175-5
B	Force Plate	5178-1
C	Removal Clamshells	5175-4
D	Clamshell Securing Screws	
E	Force Pins	585-4
F	Force nut*	0108
G	Extraction Adaptor	5175-3
H	Main force screw*	0454
I	Insertion Adaptor	5175-6
J	Allen Key	
K	Thrust Bearing*	0662

*Consumable

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Instructions

Removal

- The kit is designed to aid replacement of the Gen2 wheel bearing in situation on the vehicle. Always refer to manufacturer's documentation for the correct procedure.
- Remove the brake caliper and disc. Remove the driveshaft.
- Clean the area at the back of the hub prior to removal of the bearing to prevent dirt and debris jamming the force screw, force nut and adaptor.
- Assemble the removal clamshells (C) to the bearing/flange; refer to diagram (Fig 1), secure with the set screws (D) supplied.
- Assemble the four force pins (E) to the force plate (B). The rubber O-ring on the force pin will secure it in the force plate socket.
- Offer up the force plate/pin assembly to the clamshells, and fit the main force screw through the force plate/pin assembly.
- From behind, fit the extraction adaptor (G) over the end of the force screw. Collar-end in towards force screw - refer to Fig 1.
- Secure the assembled tool with the force screw nut (F). Long threaded end of force screw nut in towards force screw - refer to Fig 1.
- Lubricate the force screw threads with black molybdenum disulphide grease (CV joint grease). This must be done every time the tool is used.
- To withdraw the bearing/flange, hold the force nut (F) with a 30mm spanner while turning the force screw with a 22mm socket on a breaker-bar or long ratchet handle. (Do not use air tools.)

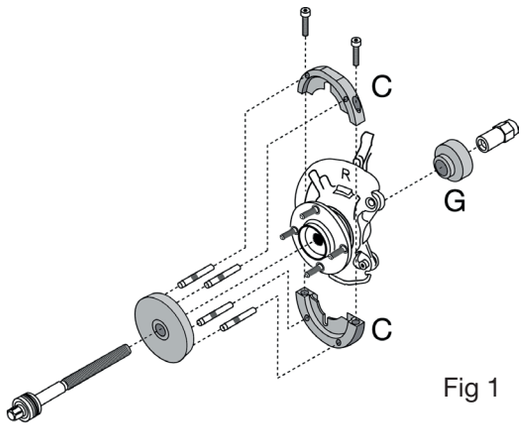

Fig 1

Installation

- Important: Before fitting the new bearing/flange assembly again clean the area at the back of the hub, and around the hub housing. Any dirt or debris left within the hub housing could prevent the bearing from seating properly and cause premature failure.
- Initially offer up the insertion Adaptor (I) making sure to does not interfere with the ABS sensor
- Refer to Fig 2: Assemble insertion clamshells (A) onto new bearing/flange and secure with set screws (D) supplied.
- Assemble the four force pins (E) to the force plate (B). The rubber O-ring on the force pin will secure it in the force plate socket.

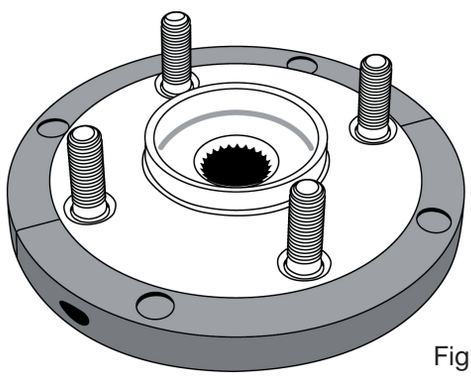
Fig 2

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- Refer to Fig 3: Offer up the force plate/pin assembly to the clamshells, and fit the main force screw through the force plate/pin assembly.
- From behind, fit the insertion adaptor (I) over the end of the force screw so that it sits on the outer edge at the rear of the hub carrier.
- Secure the assembled tool with the force screw nut (F). Long threaded end of force screw nut in towards force screw - refer to Fig 1.
- Lubricate the force screw threads with black molybdenum disulphide grease. This must be done every time the tool is used.

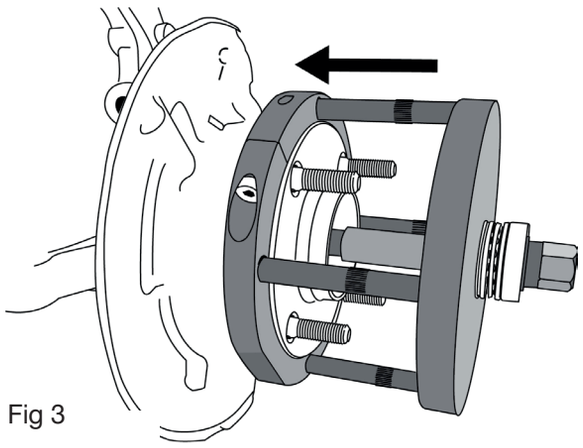

Fig 3

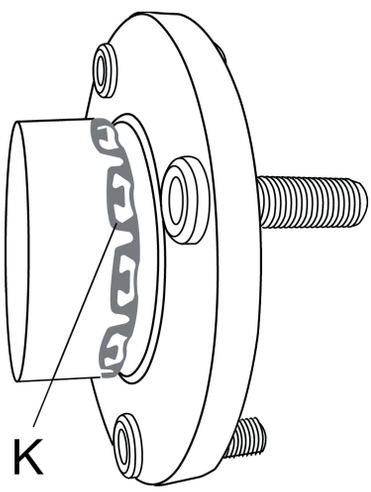

Fig 4

- To push in the new bearing/flange, hold the force nut (F) steady with a 30mm spanner while turning the force screw with a 22mm socket on a breaker-bar or long ratchet handle. (Do not use air tools.)
- Turn force screw until bearing/flange is fully home. If fitted, ensure that the tangs of the barbed retaining ring (K) are correctly seated in the retaining groove (an audible click should be heard when the barbed retaining ring seats) See Fig 4.
- Assembly any brake and drive shaft components that were removed prior to replacing the wheel bearing.
- Tighten all bolts and fixings to manufactures recommended tightening torques
- Ensure brake operation is satisfactory before road testing.

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