

Warning

- Always ensure the threaded force screw of the tool is lubricated with suitable high load bearing grease and the thread is clean and free from debris. (We recommend the use of molybdenum Disulphide grease, black grease or CV joint grease)
- Use of power tools for tightening the force screw will void the warranty
- Always read and follow the manufacturers instructions
- Always wear gloves, safety goggles and safety boots
- Always tighten components to the manufacturers recommended torque settings
- Cleanliness is essential, any dirt or debris left within the hub housing could prevent the bearing from seating properly and cause premature failure.
- Always clean the area of the back of the hub prior to removal of the bearing to prevent dirt and debris from damaging the housing and jamming the puller bush/force screw thread.
- The kit utilises an open force screw bearing design to allow ease of cleaning. Ensure the bearing is kept clean and free from dirt and debris. Lubricate with light oil.
- Use of this kit requires the partial dismantling of the vehicles braking system and drive shafts, always refer to the manufacturers instructions.
- The Tool Connection cannot be held responsible for any damage or injury to property or person how so ever caused.



Safety First. Be Protected.

Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.



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5823

LASER®

GEN 2 Wheel Bearing Kit Smart Car Forfour | Mitsubishi Colt Mk6

Instructions



- The 5823 kit is designed for the Smart Forfour (2004 on) front GEN 2 wheel bearings and also fits Mitsubishi Colt Mk 6 (2004 on).
- Generation II style wheel bearings are a wheel bearing and drive flange that cannot be separated.
- By using clamshells and force plate the tool ensures the loads of insertion are taken only on the outer race of the bearing.
- Always check size of bearing before purchase.
- Always grease the threaded bar.
- Replacement bar available.

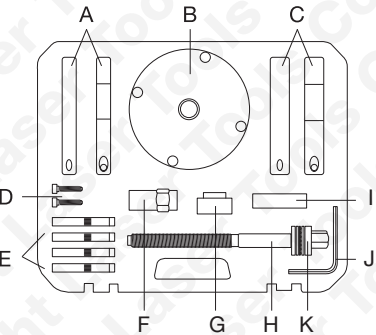


In order to ensure that the new bearings are not overloaded during installation it is important that the correct tools are used to fit the bearing/flange assembly. Generation 2 wheel bearings are supplied and fitted as a complete unit of bearing and integral mounting flange. Due to this design, Generation 2 bearing units must not be fitted in the same manner as a conventional wheel bearing. If pressed into place in this manner the load being applied to the inner race will cause damage to the bearing and premature failure. By using clamshells and force plate this tool ensures that the loads of insertion are taken only on the outer race of the bearing.

The kit is designed to remove and replace the bearing/flange in situ 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*	Laser 0108
G	Extraction Adaptor	5175-3
H	Main Force Screw*	Laser 0454
I	Insertion Adaptor	5175-6
J	Hex Key (6mm)	
K	Thrust Bearing*	Laser 0662

*Consumable

Instructions | Removal

The kit is designed to remove and replace the bearing/flange in situ on the vehicle. 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 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. Take care to line up cut outs with the ABS sensor.
- 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.
- To withdraw the 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.)

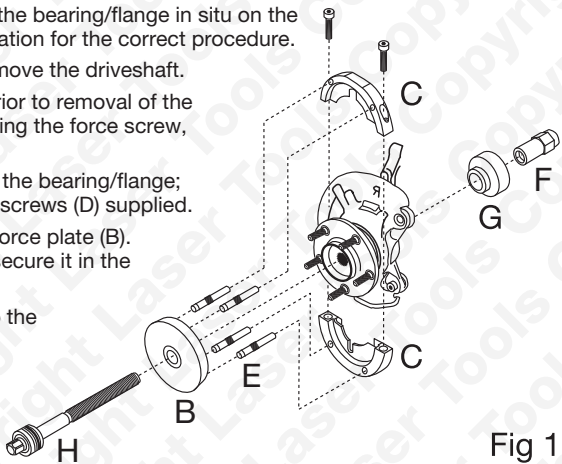


Fig 1

Instructions | Fitting a New Bearing/Flange Assembly

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.

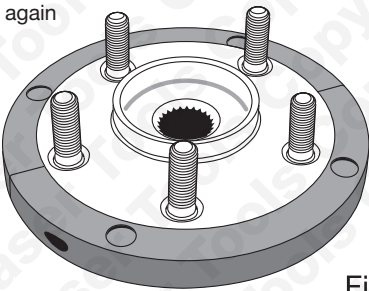


Fig 2

- 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.

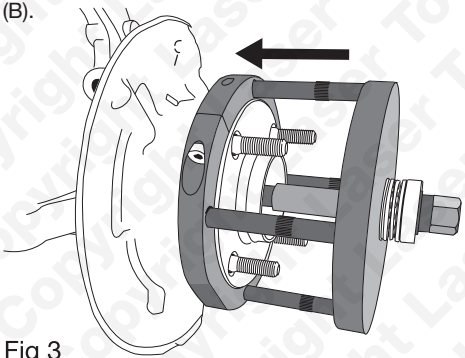


Fig 3

- 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. Take care to line up cut outs with the ABS sensor.
- 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.
- 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. See Fig 4.

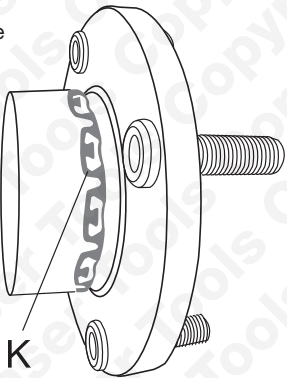


Fig 4