

ET1699A MINI (N18) VALVE PRESSURE SPRING

REMOVER/INSTALLER





VIDEO

- This tool is used to compress the valve spring for removing / installing the valve spring.
- Application: BMW MINI N18
- **BMW OEM Equiv:** 119 571/ 119 572

Instructions:A. <u>REMOVAL</u>





 Aim and fit the slots of H.C.B-A1699-01 at the balance shaft bearing (Fig.1)

Caution! Please install the tool to proper position. (Please follow the allows as picture shows to operate)

 After fitting the tool, keep turning the knurled knob on the tool (Fig.2) until the tabs hold and lock the valve spring solidly (Fig.3).

Caution ! Must make sure the tabs hold and lock the valve spring in case the valve spring pops out to cause casualties.







3. Loosen the bolt (Fig.4 , as allow shows)

- 4. Use a vise to lock H.C.B-A1699-02.
- 5. Fit H.C.B-A1699-01 which is holding the valve spring to H.C.B-A1699-02.
- Push the lever forward, hold the lever to against the fore of spring, open the lock, slowly relieve the pushing force, and valve spring removal is completed. (Fig.5)

B. Installation



- 1. Use a vise to lock H.C.B-A1699-02.
- 2. Fit the valve spring on the tool, keep turning the knurled knob until the tabs of the tool hold and lock the valve spring solidly.
- Aim the slots of the tool at the valve spring legs, push the lever as the arrow shows until the tool is surely locked. (Fig.6)

Caution !

The slots of H.C.B-A1699-01 must be surely fitted on the valve spring legs, and the tabs must surely lock the spring in case of breaking the valve spring or prevent the spring from popping out to cause casualties.



- 4. Lean the tool to 45 degree and fit the valve spring back to its position.
- After fitting the valve spring back to its position, tighten the bolt to the designated torque value. (Fig.7, as arrow shows)



- Turn the knurled knob to loosen the valve spring, and the installation is completed. (Fig.8)
- Caution ! Before finishing the installation, do NOT loosen the lock and knurled knob to prevent the valve spring from popping out and cause casualties.