

**MINI Cooper (R55, R56, R57)**  
**Service Manual: 2007-2013**  
**Cooper, Cooper S, John Cooper Works (JSW)**  
**including Clubman and Convertible**

Price: \$139.95  
Bentley Stock Number: BM13  
Publication Date: 2014.10.01  
ISBN: 978-0-8376-1730-5  
Hardcover, 8 3/8 in. x 11 in.  
Case quantity: 5  
1064 pages, 1845 photos, illustrations and diagrams  
**Includes color MINI Cooper familiarization section**

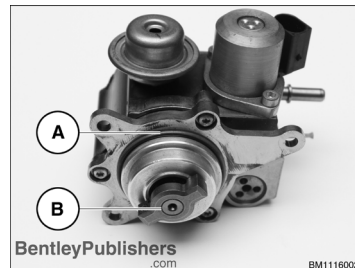
The **MINI Cooper Service Manual: 2007-2013** is a comprehensive source of service information and specifications for MINI Cooper models from 2007 to 2013 (Mk II). The aim throughout this manual has been simplicity, clarity and completeness, with practical explanations, step-by-step procedures and accurate specifications. Whether you're a professional or a do-it-yourself MINI owner, this manual will help you understand, care for and repair your car.

**Features:**

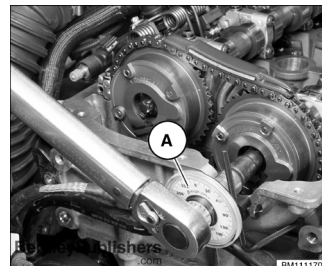
- Procedures for everything from changing the ATF to replacing a dirty cabin microfilter and resetting the CBS (condition based service) system. This manual tells you what to do and how and when to do it.
- Engine and cylinder head service with variable camshaft timing (VANOS) setup and adjustment, including Valvetronic service on N12, N16, and N18 engines.
- Driveability troubleshooting and detailed repair information for the Siemens DME Engine Management Systems.
- Turbocharger and intercooler information, including component removal and replacement (Cooper S, JCW).
- Drivetrain maintenance, including troubleshooting, adjustment and repair of clutch, gearshift linkage and drive axles.
- Suspension repairs, including strut and control arm replacement procedures.
- Manual and automatic transmission removal, installation, seal replacement and external service.
- System repair information for antilock brakes (ABS), automatic stability control (ASC) and dynamic stability control (DSC).
- Heating and air conditioning repair (IHKS / IHKA), including component replacement.
- Body adjustments and repairs for sunroof and convertible, including resetting of the rollover protection system.
- Electrical system service, including an easy to use electrical component section with detailed illustrations and photos.
- Comprehensive wiring schematics, including fuses and grounds.
- MINI OBD II diagnostic trouble codes, SAE-defined and OBD II P-Codes, as well as basic scan tool information and OBD II Diagnostic Trouble Codes (DTCs).
- MINI factory tolerances, wear limits, adjustments, and tightening torques.



Step-by-step instructions for resetting CBS service items.  
**020 Maintenance**



High pressure fuel system service on turbo engine, including replacing HP fuel pump.  
**160 Fuel Tank and Fuel Pump**



Detailed engine service, including VANOS camshaft timing adjustment.  
**117 Camshaft Timing Chain**

**Models & engines covered:**

- Cooper:** 1.6 liter normally aspirated engine (engine codes N12, N16)
- Cooper S:** 1.6 liter supercharged engine (engine codes N14, N18)

**Transmissions covered:**

- Manual:** 6-speed Getrag (GS6-55BG for Cooper, GS6-53BG for Cooper S)
- Automatic:** 6-speed with Agitronic, Aisin (GA6F21WA)