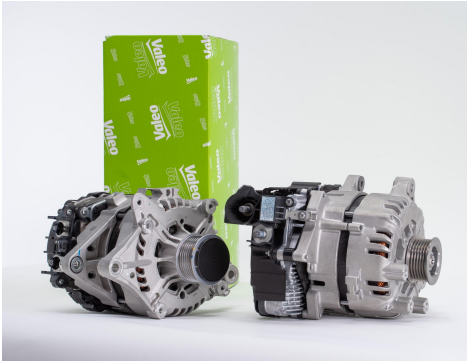


FITTING INSTRUCTIONS

48V iBSG (Integrated Belt Starter Generator)



Removal Steps



Step 1 - Disconnect (-) terminal from the 12V battery



STEP 2 - Disconnect +12V terminal in 48V pack



STEP 3 - Disconnect -48V terminal in 48V pack



STEP 4 - Disconnect +48V terminal in 48V pack



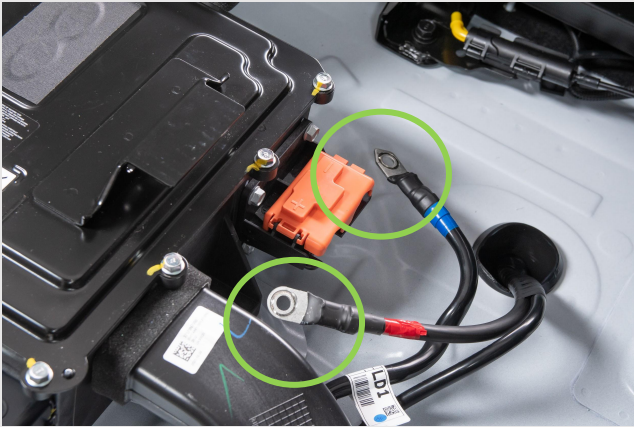
Website
valeservice.us/en-us



Technical Assistance
1-888-718-2536

valeservice.us





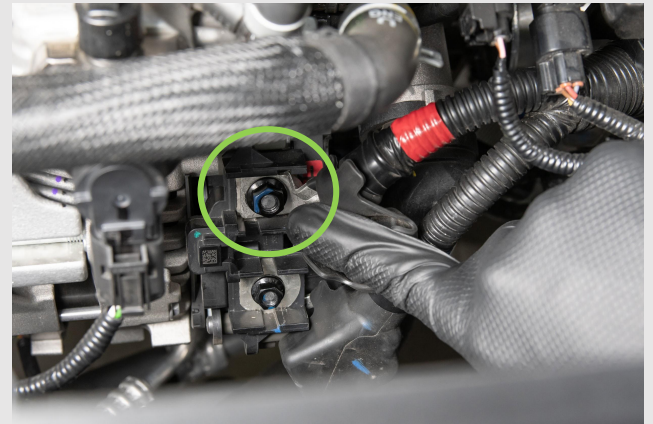
STEP 5 - Cover both terminals with isolate tape to avoid any damage



STEP 6 - Check with the multimeter the absence of current in the iBSG



STEP 7 - Disconnect -48V terminal from the iBSG



STEP 8 - Disconnect +48V terminal from the iBSG



STEP 9 - Remove the wheel



STEP 10 - Remove the wheel cover

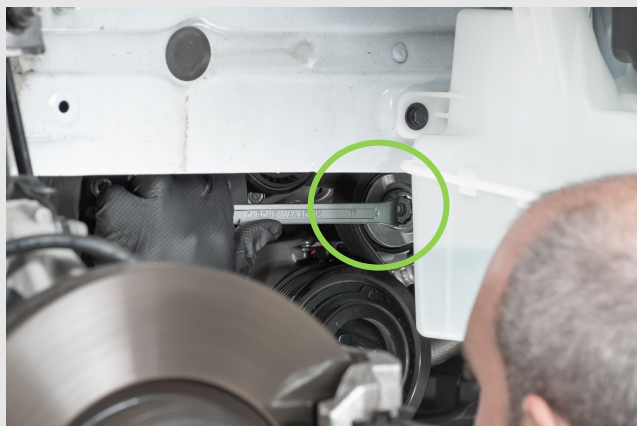




STEP 11 - Remove the lower engine cover



STEP 12 - Locate the belt tensioner



STEP 13 - Displace it in order to fix the blocking tool if needed



STEP 14 - With the belt tensioner loose, remove the belt



STEP 15 - Locate and remove the upper bolt of the iBSG



STEP 16 - Disconnect the ECU connector from the iBSG





STEP 17 - Remove the **lower bolt** from the iBSG



STEP 18 - **Rotate** the iBSG & take it out with the **regulator part down**

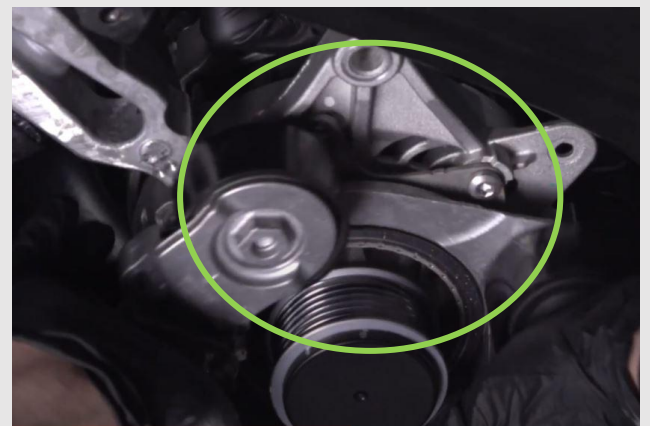
Note: Between Step 17 & 18, it depends on **car manufacturer & engine type** to remove the iBSG, you will need to:

1. **Release** the Air Conditioning compressor (without recovery of the gas)
2. **Remove** completely the Air Conditioning compressor (recovering the gas from the circuit)
3. **Release or remove** the Air Conditioning compressor and **release** the central engine support
4. **Release or remove** the Air Conditioning compressor and also **release** the engine crossbar

Installation Steps

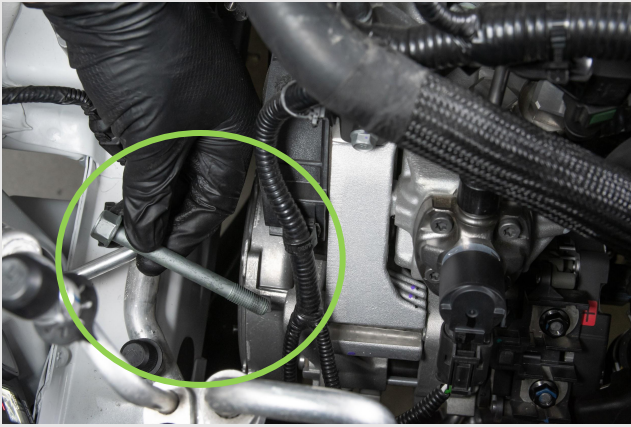


STEP 1 - Position the iBSG with the **regulator part down**

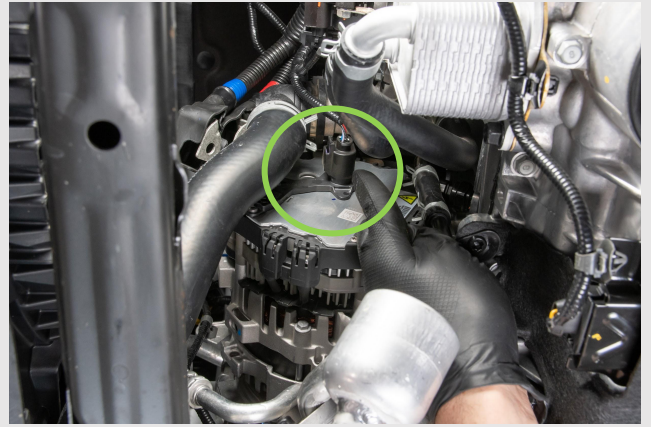


STEP 2 - **Rotate** the tensioner to **align** the blocking holes

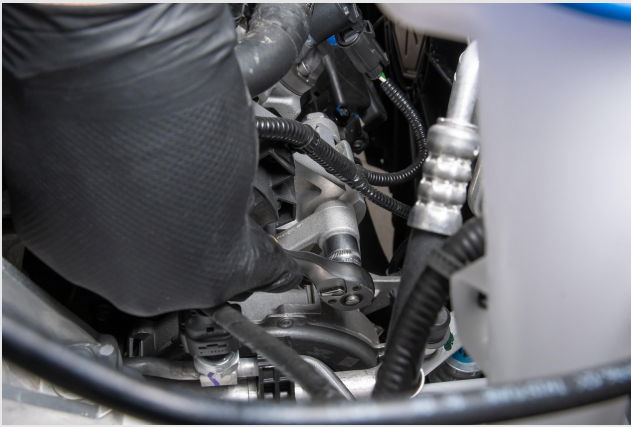




STEP 3 - Put & tighten the **lower bolt** of the iBSG



STEP 4 - Plug the **ECU signal connector** into iBSG



STEP 5 - Put and tighten the **upper bolt** of the iBSG



STEP 6 - **Do not** forget to plug again the electrical **connections** for the compressor



STEP 7 - Place the belt in the **correct position** defined by the car maker (it's recommended to install a new one)



STEP 8 - Release the **blocking tool** in the tensioner to tension again the belt





STEP 9 - Install again the **lower engine cover**



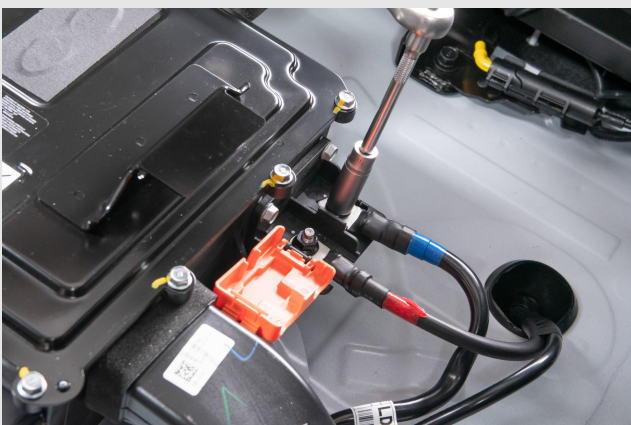
STEP 10- Install again the **wheel cover**



STEP 11 - Install the **wheel**



STEP 12 - Plug again **+48V terminal** in **48V pack**

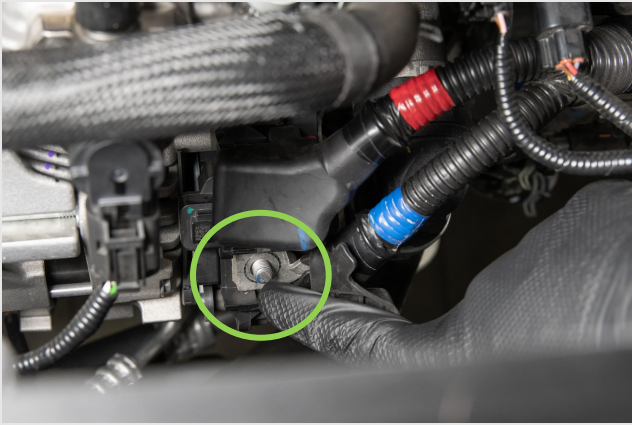


STEP 13 - Plug again **-48V terminal** in **48V pack**



STEP 14 - Plug agian **+12V terminal** in **48V pack**





STEP 15 - Plug again **-48V** terminal in the iBSG



STEP 16- Plug again **+48V** terminal in the iBSG



STEP 17 - Plug again **(-)** terminal from the **12V** battery

Note: between Step 5 & 6, it depends on **car manufacturer & engine type** to place again the iBSG, you will need to:

1. **Place** the Air Conditioning compressor
2. **Place** completely the Air Conditioning compressor and **charge** the gas in the circuit
3. **Place** the Air Conditioning compressor and also **tighten** the central engine support
4. **Place** the Air Conditioning compressor and also **place** the engine crossbar

