

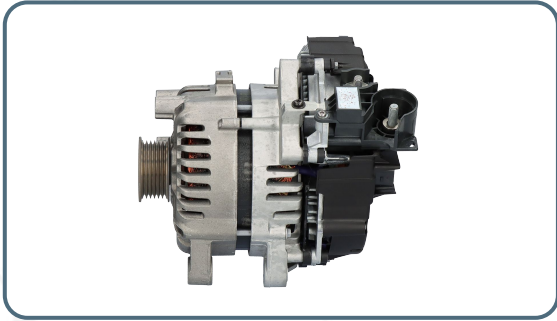


FITTING

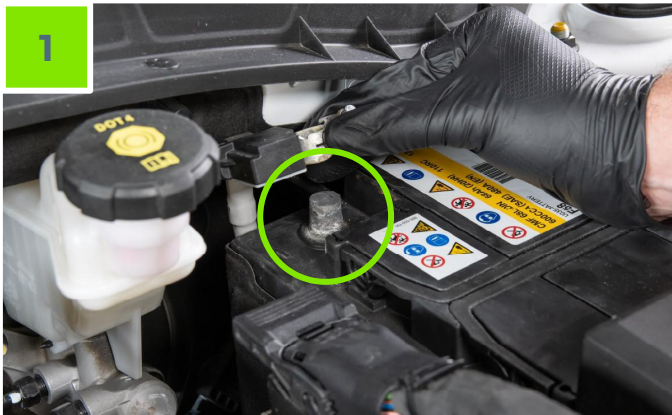
INSTRUCTIONS

48V iBSG

(Integrated Belt Starter Generator)



REMOVAL STEPS



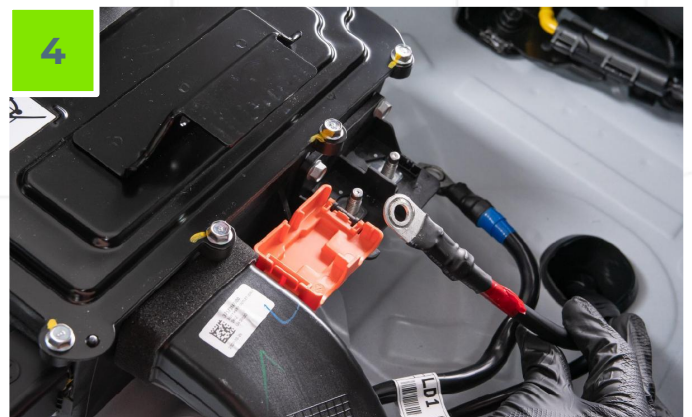
STEP 1 - Disconnect (-) terminal from the 12V battery



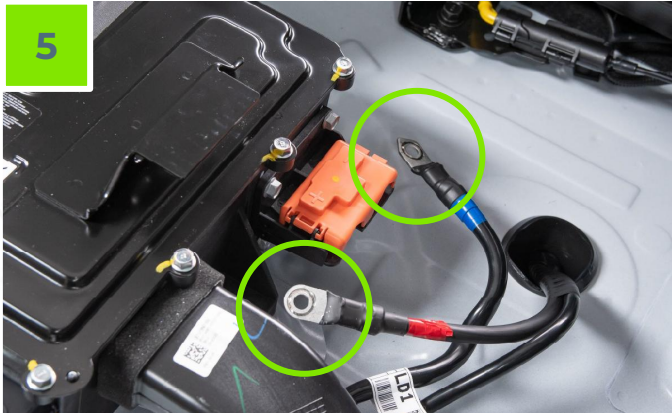
STEP 2 - Disconnect +12V terminal in 48V pack



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



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



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



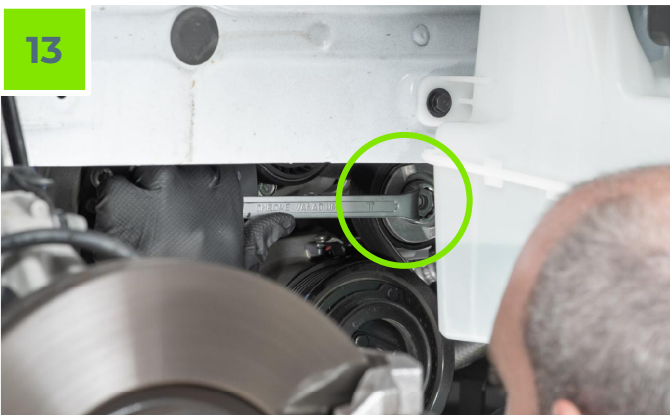
STEP 10 - Remove the wheel cover



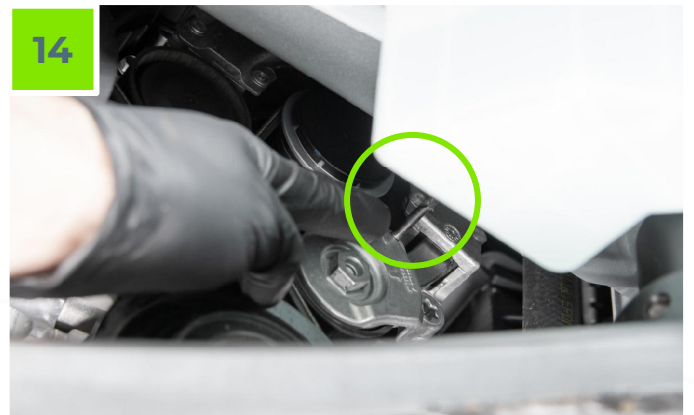
STEP 11 - Remove the lower engine cover



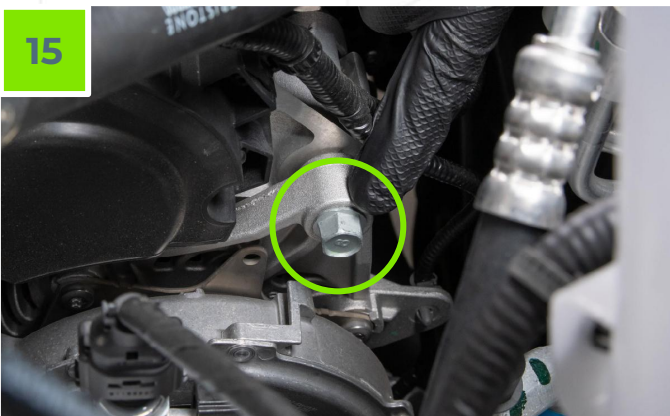
STEP 12 - Locate the belt tensioner



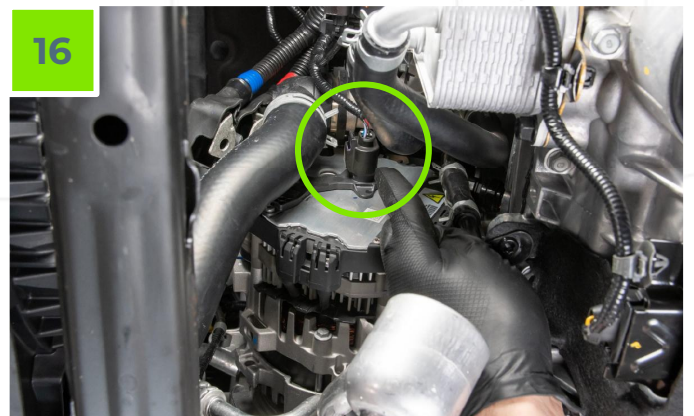
STEP 13 - Displace it in order to fix the blocking tool if needed



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

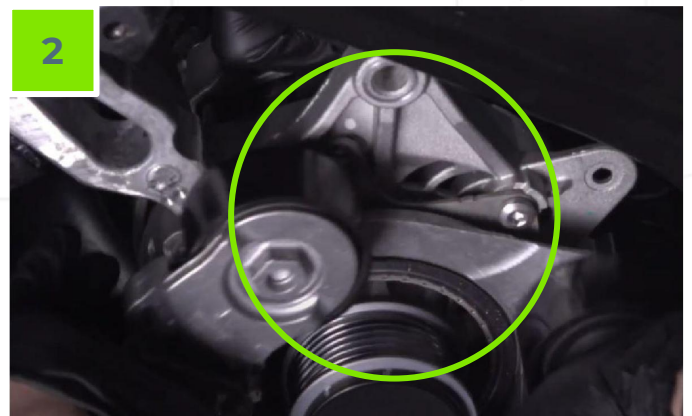
Note: Between **Step 17 & 18**, it depends on **car manufacturer & engine type** to remove the iBSG, you will need to:

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



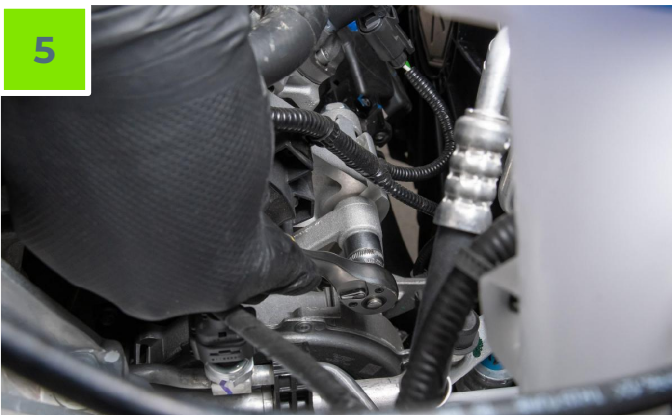
STEP 2 - Rotate the tensioner to align the blocking holes



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



STEP 4 - Plug the ECU signal connector into iBSG



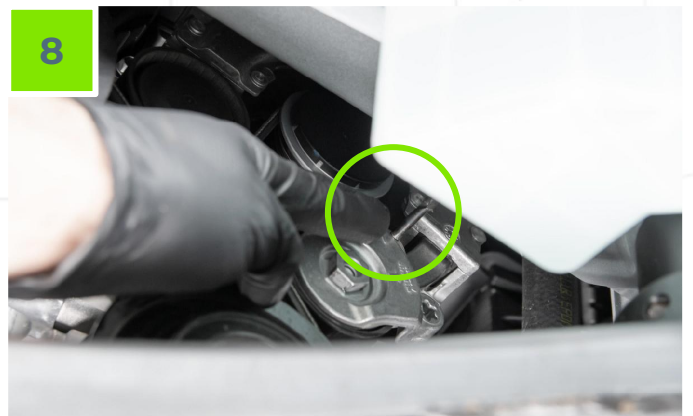
STEP 5 - Put and tighten the upper bolt of the iBSG



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



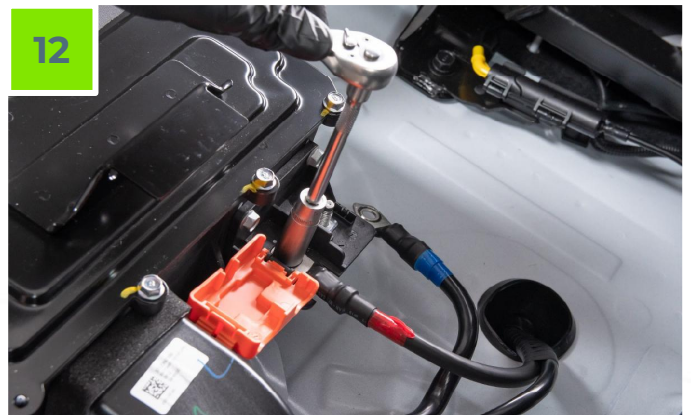
STEP 9 - Install again the lower engine cover



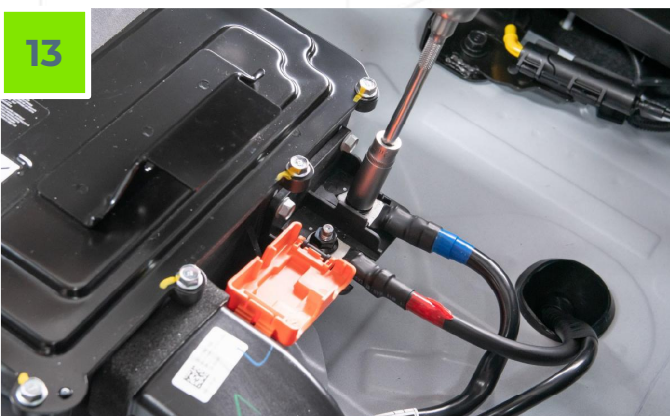
STEP 10- Install again the wheel cover



STEP 11 - Install the wheel



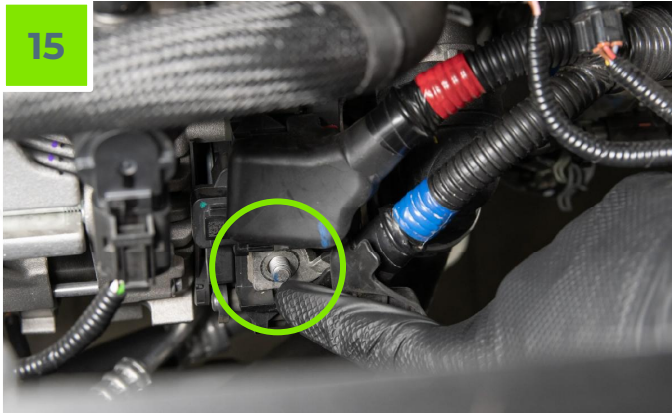
STEP 12 - Plug again +48V terminal in 48V pack



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



STEP 14 - Plug again +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