DOOSAN Infracore

65.99897-8091A

# Operation & Maintenance Manual

## GENERATOR NATURAL GAS ENGINE

## GV158TIC
## GV180TIC
## GV222TIC

## 5.5. V - Belts

- The tension of the belts should be checked after every 2,000 hours of operation.

### 5.5.1. Change the belts if necessary

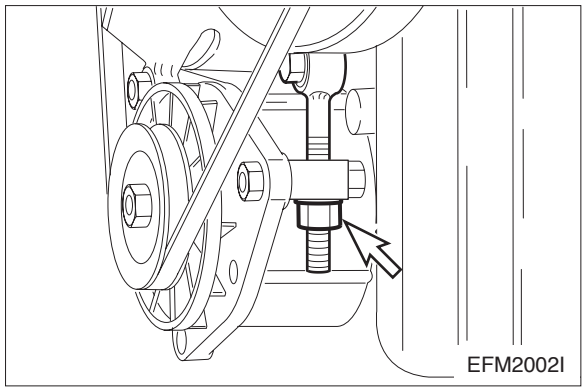
- If in the case of a multiple belt drive, wear or differing tensions are found, always replace the complete set of belts.

### 5.5.2. Checking condition

- Check belts for cracks, oil, overheating and wear.

### 5.5.3. Testing by hand

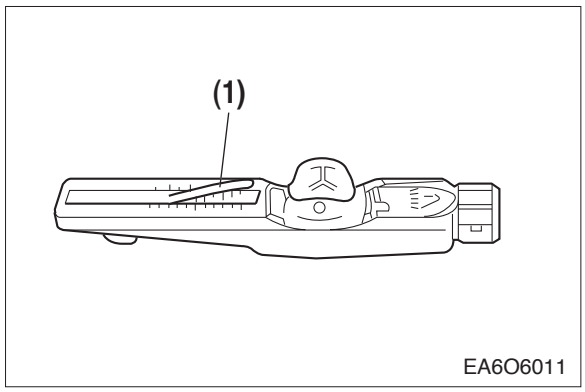
- By the finger-pressure the belt is pressed by 10-15mm between the pulleys in normal condition. (Pressed midway between the belt pulleys)
- A more precise check of the V-belt tension is possible only by using a V-belt tension tester.




### 5.5.4. Measuring tension

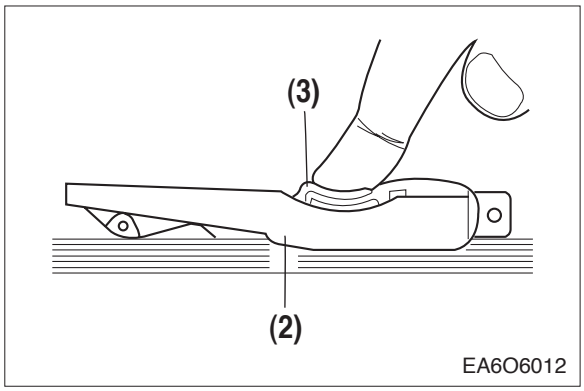
**a) Lower indicator arm (1) into the scale.**

- Apply tester to belt at a point midway between two pulleys so that edge of contact surface (2) is flush with the V-belt.
- Slowly depress pad (3) until the spring can be heard to disengage. This will cause the indicator to move upwards.
- If pressure is maintained after the spring has disengaged a false reading will be obtained!



**b) Reading of tension**

- Read of the tensioning force of the belt at the point where the top surface of the indicator arm (1) intersects with the scale.
- Before taking readings make ensure that the indicator arm remains in its position.




- V-belt tension

| Type | Drive belt width | Tensioning forces on the tester | | |
|---|---|---|---|---|
| | | new installation | | When servicing after long running time |
| | | installation | After 10 min. running time | |
| **M** | 9.5 mm | 50 kg | 45 kg | 40 kg |
| **A *** | **11.8 mm** | **55 kg** | **50 kg** | **45 kg** |
| **B** | 15.5 mm | 75 kg | 70 kg | 60 kg |
| **C** | 20.2 mm | 75 kg | 70 kg | 60 kg |

*** : Adopted in GV158TIC, GV180TIC, GV222TIC engine**

### 5.5.5. Tensioning and changing belts

- Loosen fixing bolts and nuts.
- Adjust the alternator until belts have correct tensions.
- Retighten fixing bolts and nuts.
- To change the belts loosen fixing bolts and nuts. Then push the alternator toward water pump pulley by hand.