

How to inspect an Automotive belt

■ An Automotive Belt is the Vital to the Operation of an Engine

If an automotive belt breaks or is not fully functional due to a loose tensioning, it may cause overheating the engine, poor generation of electricity, a dead battery etc...

1 Check if the belt tension is proper

The belt tension varies depending on its condition. Therefore, it is necessary to inspect each belt according to the maintenance manual.

■ How to determine proper tension

1. Push or pull up or down with your thumb at the center between the two pulleys with a force 98N (10kgf).
2. Next, use the below table to adjust the tension. If the span is longer or shorter than 200mm, change the figures accordingly in proportion to the span length.

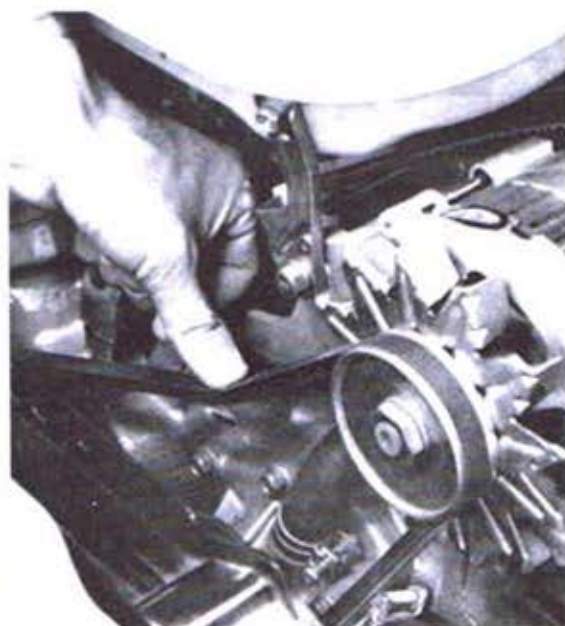
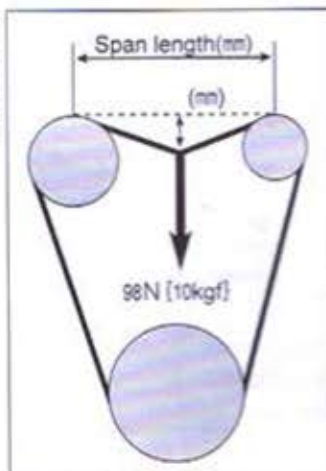
■ Recommended deflection for Raw edge belt (For span length of 200mm)

Belt type	Deflection amount (mm)	
	New belt	Re-tensioning
HM, A	6~8	8~10
B	5~7	7~9

■ Ribstar Belt (V-ribbed Belt)

(No. of ribs)	Deflection amount (mm)	
	New belt	Re-tensioning
3	6~8	8~10
4	5~7	6~8
5	5~6	6~7
6	4~5	5~7
7	3~4	4~5

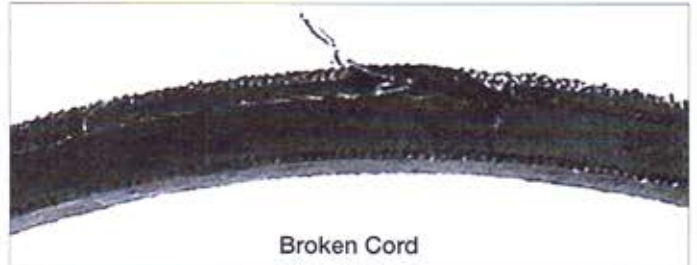
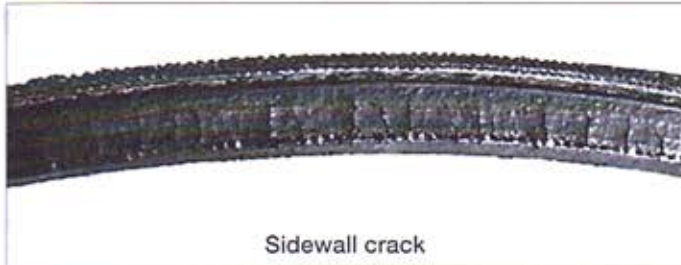
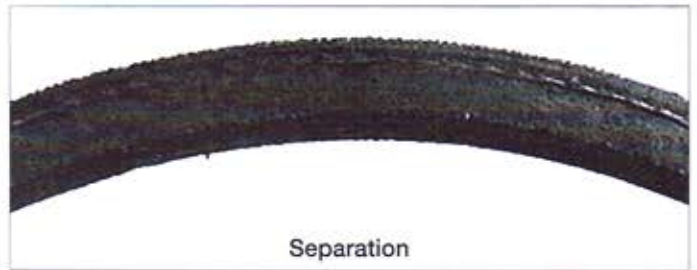
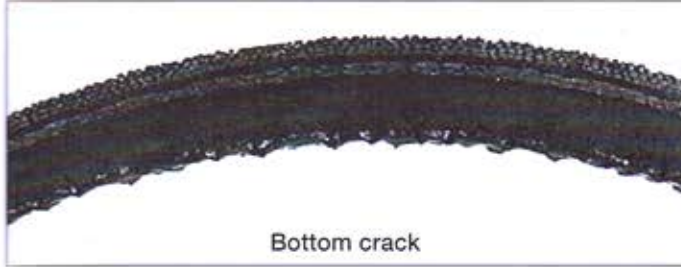
It is found that too much tension may damage bearing of alternator. Problem such as overheated engine, dead battery and belt breakage can be caused more often by lose belt.



⚠ Warning Please make sure the engine is turned off and at a complete stop when inspecting a belt.

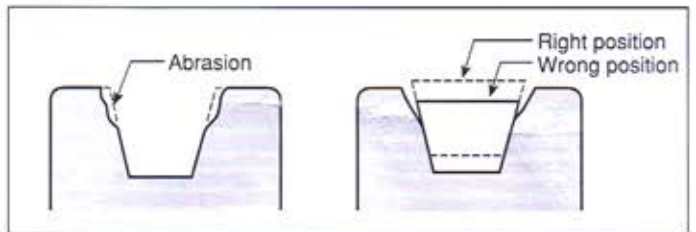
2 Check if there are any signs of deterioration to the side and the back of the belt

Regardless of the top appearance of the belt, there are many cases, where the side and back of the belt are damaged. Therefore please check the side and back of the belt, as well as the top, using the picture shown, replace the belt if there are any signs of damage.



3 Check if there is any abrasion to the pulley groove

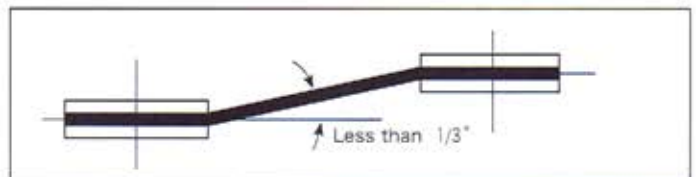
If the belt is falling into the pulley groove due to a worn out pulley, or if the pulley has been damaged, the pulley should be replaced.



Replacement and Adjustment of pulley

■ The replacement and adjustment of the pulley should be done in a proper repair shop.

- Replace the pulley if there is a worn out or damaged pulley groove.
- Adjust the alignment of the pulley, following the instructions in the figure below.



■ Notes on Replacement of the Belt

Since Ribstar Belts (V-ribbed belts) have low stretch cord, please select the proper MITSUBOSHI part number, and replace it according to the maintenance manual.

We recommend to consult a certified workshop when having replacement concerns.