6.8 Inspection of the turbine wheel and nozzle wheel

This inspection is recommended procedure to find out potential operation defects, mainly cracks on the turbine blades or defect of nozzle wheel.

**WARNING**
Before the inspection of engine hot section leave the engine cool down. Hot engine can create burn of skin. Use the insulating gloves and other protective means.

**WARNING**
Disconnect the engine from the power source to avoid unwished starting.

**NOTE**
In case it is used split exhaust, it is necessary to dismount his end part.

6.8.1 Inspection of turbine wheel

The inspection of turbine wheel is provided by endoscope with optical zoom 12x. For detail view it is provided the inspection of blade root and its bottom part and follow the upper part of blade. Inspection is provided on all 41 blades with hand rotating of the compressor wheel. Damage of blades is not allowed.

**WARNING**
In case of detection some crack on the blade or any other damage of turbine blade do not start the engine and send for inspection to the producer.

![Figure 6-4 Inspection of turbine wheel](image-url)
6.8.2 **Inspection of nozzle wheel**

The inspection of turbine wheel is provided by endoscope. For the visibility it is necessary to turn the turbine wheel from the compressor side to see all nozzle blades and its condition. Damage of blades is not allowed.

**WARNING**

In case of detection some crack on the blade or any other damage of nozzle blades do not start the engine and send for inspection to the producer.

![Figure 6-5 Inspection of nozzle wheel](image)

6.8.3 **Samples of potential damages of turbine blades**