



Follow the red arrow from the applicable trouble, and check each numbered symptom. (The check points can be known also from the colored block mark.)

Trouble description

Trouble related to the blade

- Early wear
- Early tooth drop-out/chipping
- Early breakage

Trouble related to the cut product

- Early crooked cut
- Rough cut surface

Trouble during cutting

- Loud cutting noise
- Blade stoppage<

Check points

1, 2, 5, 6, 7, 8, 9, 10, 11, 17a, 19, 20, 21, 24a, 27	crook
1, 2, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15b, 21, 22, 27	Rough
2, 5, 6, 7, 8, 9, 10, 21, 27	Wear
1, 2, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15b, 21, 22, 23, 24a, 26b, 27	Chipping
1, 2, 3, 4, 5, 6, 8, 9, 10, 15a, 16, 17b, 18, 19, 24b, 25, 26a, 27	Breakage
1, 2, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15b, 21, 22, 23, 24a, 26b, 27	Noise
1, 2, 3, 4, 5, 6, 8, 9, 10, 15a, 16, 17b, 18, 19, 24b, 25, 26a, 27	Stoppage

Check the applicable items

- 27. Knocking of housing head**
Entry of air into the hydraulic oil, deterioration of operating fluid, scuffing of housing (swing/lift) cylinder, etc. may have occurred.
- 26. Incorrect blade wheel to flange contact**
a: Contacting the flange.
b: Too far apart from the flange.
- 25. Uneven wear of blade wheel**
- 24. Faulty blade tension**
a: Too low
b: Too high
- 23. Constriction caused by material to be cut**
Use a blade of WVS type for cutting a large-size rolled H-beam. Constriction occurs even with a solid material, if it is large-size forged steel. Measures such as driving of a wedge into the cut groove are required.
- 22. Biting of foreign matters**
Check for presence of foreign matters such as wire, scale and rag in the tube or in any gap of bundled materials.
- 21. Variation in machinability of materials to be cut**
Variation may be caused by differences in lots, manufacturers, heat treatment, etc.
- 20. Maladjusted blade perpendicularity**
This is the most possible causal factor for bending in cutting.
- 19. Worn inserts**
- 18. Worn torsion-raise guide rollers**
- 17. Inappropriate insert clamping force**
a: Too weak
b: Too strong
- 16. Worn or damaged back-up guide**
- 15. Faulty contact of back-up guide**
a: Pushed excessively
b: Too far apart

- 1. Excessive blade guide gap**
Correct adjustment of the guide position is an essential condition for long service life.

- 2. Unstable blade traveling**
Knocking caused by an error in the speed reducer and overload caused by damage to bearings of the blade wheel may have occurred.

- 3. Corroded blade**
- 4. Blade hit with the material to be cut, etc.**
Full care is required as even minor matters may cause serious problems.

- 5. Inappropriate blade type or tooth pitch**
There are an extraniy large number of types of material to be cut based on various combinations of material grade, shape, heat treatment, working method and so forth. It is necessary to select an appropriate blade with these factors fully taken into account.

- 6. Incorrect settings of cutting rate and cuttingspeed**
a: Too fast
b: Too slow
Since errors may occur among machines, it is important to periodically measure the actual-speed.

- 7. Insufficient break-in cutting**
Stable service life can be assured if sufficient break-in cutting is performed until appropriate tooth point contact is obtained.

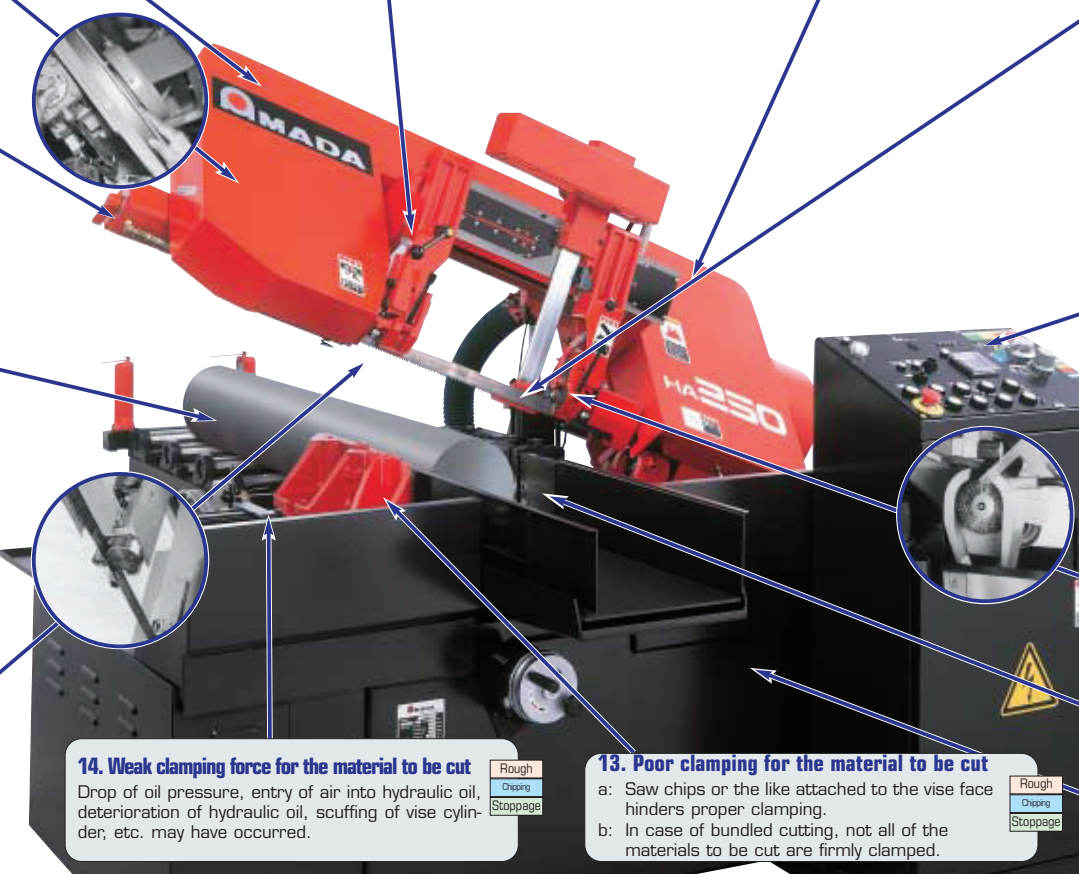
- 8. Insufficient cutting fluid supply**
Sufficient supply is needed to both the cutting section and the insert section.

- 9. Low cutting fluid concentration**
The machine main unit may be corroded and the service life of the sliding section may be shortened due to insufficient lubrication.

- 10. Maladjusted wire brush**
If the brushing effect drops, saw chips enter other sliding sections of the machine besides the blade, and the service life will be shortened.

- 11. Cut Product jamming**
Such cutting may occur when the product length is short or when cutting bundled, small-diameter materials.

- 12. Vibration of the entire machine**
The machine may be installed improperly or vibration source such as a large-size press may exist in the vicinity of the machine.



- 14. Weak clamping force for the material to be cut**
Drop of oil pressure, entry of air into hydraulic oil, deterioration of hydraulic oil, scuffing of vise cylinder, etc. may have occurred.

- 13. Poor clamping for the material to be cut**
a: Saw chips or the like attached to the vise face hinders proper clamping.
b: In case of bundled cutting, not all of the materials to be cut are firmly clamped.