

TECHNICAL SERVICE INSTRUCTION

TSI-001

Viking Axe Teeth Sharpening

Action Number: TSI-001

Product Affected: All Fecon mulchers with Viking Axe teeth

ECN Number: N/A

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Purpose

This service bulletin provides instructions for properly inspecting and sharpening Viking Axe teeth to maintain optimal mulching performance and extend tooth service life.

Scope

This bulletin applies ONLY to Viking Axe teeth. Viking Sword and Cubit teeth use different sharpening procedures and are excluded from these instructions.

Required Tools

- Viking sharpening gauge (Part #VK-SG001)
- Handheld grinding wheel (7" diameter, 36-grit aluminum oxide recommended)
- Fecon Tough Flex grinding disk ([Click here to purchase](#))
- Safety glasses and face shield
- Heavy-duty work gloves
- Dust mask or respirator

Safety Precautions

- Always wear appropriate PPE including eye protection, face shield, and gloves
- Ensure proper ventilation in the work area
- Disconnect power to grinding tools when not in use
- Secure teeth properly before grinding to prevent movement
- Allow teeth to cool between grinding passes to prevent overheating

Determining When Sharpening is Needed

Inspection Procedure

1. Clean the tooth surface of any debris or buildup
2. Place the Viking sharpening gauge over the tooth as shown in Figure 1
 - Position the back edge firmly against the gauge support
 - The top edge of the gauge should rest flat across the entire top surface of the tooth
3. Check for gaps between the gauge and the tooth top surface (see Figure 2)
 - No gap: Sharpening not required
 - Visible gap: Sharpening required

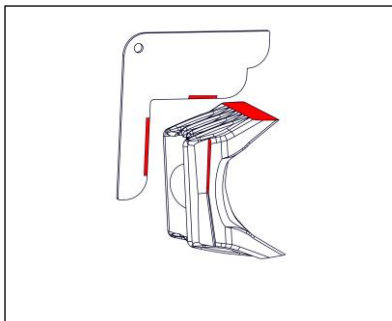


Figure 1

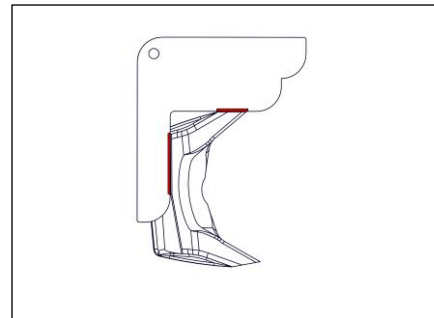


Figure 2

Sharpening Procedure

Step-by-Step Process

1. **Preparation**
 - Secure the tooth in a stable position
 - Ensure proper lighting of the work area
 - Verify grinding wheel is in good condition
2. **Grinding Technique** (estimated time: 2-3 minutes per tooth)
 - Hold the grinding wheel at a parallel angle to the top of the tooth
 - Apply moderate, consistent pressure
 - Grind from left to right, with the grinding disc cutting toward the tooth edge (see Figure 3)
 - Make multiple light passes rather than one heavy pass

- Check progress frequently using the sharpening gauge

[Watch Video Demonstration](#)

3. Verification

- After grinding, place the sharpening gauge over the tooth
- The gauge should now rest flat across the entire top of the tooth
- If gaps remain, continue sharpening with lighter passes
- Check progress frequently using the sharpening gauge

Best Practices

Tough Flex Grinding Discs

The **Tough Flex** grinding discs are specially designed for Fecon mulcher teeth and provide:

- Precision angle guidance for consistent results
- Reduced grinding time by up to 40%
- Extended tooth life by maintaining optimal cutting geometry
- Compatible with all Viking Axe teeth models

[Click here to purchase Tough Flex](#)

Best Practices

Do's

- Maintain a flat edge across the entire tooth surface
- Use the sharpening gauge before and after sharpening
- Allow teeth to cool between grinding passes
- Inspect all teeth in a set for consistent sharpening

Don'ts

- Do not over-sharpen the tip of the tooth
- Do not create a pointed or beveled edge
- Do not use excessive pressure when grinding
- Do not continue using teeth worn beyond serviceable limits

Troubleshooting

Issue	Possible Cause	Solution
Uneven edge after sharpening	Inconsistent grinding pressure	Use lighter, more controlled passes
Discoloration on tooth surface	Overheating during grinding	Allow cooling between passes, use lighter pressure
Gauge still shows gap after sharpening	Insufficient material removed	Continue sharpening with proper technique
Chipping during sharpening	Excessive grinding pressure	Use multiple light passes instead of heavy pressure

Contact Information

For technical assistance, contact Fecon Technical Support:

- Phone: (800) 528-3113
- Email: feconservice@fecon.com
- Reference: Service Bulletin TSI-001

Keywords: Viking Axe teeth, mulcher maintenance, tooth sharpening, grinding procedure, Fecon mulcher, Tough Flex grinding discs, Tough Flex sharpening discs, knife teeth, knife tooth, mulching teeth, forestry mulcher teeth, mulcher tooth maintenance, forestry equipment maintenance, mulcher tooth sharpening guide, Fecon teeth sharpening,