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We research and develop
various industrial equipment
and parts to satisfy our
customers



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WOOSUNG PRECISION INDUSTRIAL CO.,LTD.

Woosung Precision Industrial Co., Ltd.

Company Introduction

We satisfy our customers' demands with **outstanding product reliability, convenience, cost-effectiveness, and operational efficiency!**



Woosung Precision Industrial Co., Ltd. is founded in 1980, and started as a company that specialized in manufacturing of various farming tools and cultivating equipment. We are the very first company and take a great pride in localizing the manufacturing of various blades for farming and landscaping equipment in South Korea, and we have been a very prominent player in South Korea for supplying rotary tiller blades, mower blades, straw cutting blades, sickle sections, and sickle section assemblies for combine harvester since its foundation.

For many decades of manufacturing quality parts and products for many OEMs, we are moving forward to build quality landscaping and vegetation management equipment of our own by incorporating expertise in blade manufacturing and experience in supplying quality components of various machineries to both domestic and international buyers. For many years of marketing and product research have resulted as the development of attachments for landscaping and vegetation management, particularly suited for excavators of various size.

As South Korea is a very unique country, where many excavators of large and small prevail in every corner of the country, and excavators are used not only for just construction / infrastructural work, but also for farming and various chores of landscaping extensively. The rugged terrains of South Korea is ideal ground for developing various attachments for excavator, and as we are specialized in blade manufacturing, it has been a natural course of our desire in building quality equipment to meet the requirement of landscaping professionals and community to dealt with vegetation management. As the results, we have developed some unique lines of excavator attachments, ideal for **mowing / shredding, trimming, and mulching!** For many years of success in our domestic marketing here in South Korea, our products are also been offered to countries like Japan, Taiwan, Canada, the United States, and Switzerland as well. We aim to satisfy our customers by manufacturing and providing the equipment of very efficient, cost-effective, and outstanding durability with reliability!

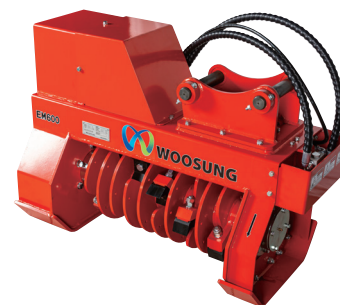
Introduction to excavator attachment range



Excavator Mounted Flail Mower



Excavator Mounted Trimmer



Excavator Mounted Mulcher

Progress in Landscaping Culture

Experience new changes and advancements in excavator attachments through Woosung!



Flail Mower / Shredder Models

EF600 / EF800 / EF1100 / EF1100S / EF1300 Flail mower / shredder are products designed to cut grass and to shred unwanted vegetation such as overgrown shrubs and weeds.

*EF1300 does not come with a Mechanical Float Adaptor.



● EF600

● EF800 / EF1100 / EF1100S / EF1300

Model	EF600	EF800	EF1100	EF1100S	EF1300
Working Width	600mm	800mm	1100mm		1300mm
Flow	30~40L/min	50~70 L/min			120~150L/min
Rated Pressure	245 kgf/cm ²				
Number of Knives	3Knife: 22set	3 Knife type : 18set	3 Knife type : 26set	3Knife: 20set	3 Knife type : 22ea
	Cup Knife 22ea	Hammer : 18ea	Hammer : 26ea	Hammer: 20ea	
Suggested Maximum Shredding Diameter	15mm	20mm	30mm	50mm	70mm
Weight	85kg	170kg	230kg	300kg	550kg
Applicable Excavator	1.7~2.5ton	3~4.5ton	5~8ton		10~14ton

Trimmer Models

EF1200 MINI / ET1200 / ET1200 TILTING trimmers are developed for trimming hedges, but these models are also capable of handling low-lying vegetation.

*ET1200 TILTING is capable of tilting the sickle section assembly to tackle trimming angles with ease.



● ET 1200MINI

● ET 1200

● ET1200 TILTING

Model	ET 1200MINI	ET 1200	ET 1200 TILTING
Working Width	1200mm		
Flow	30~40L/min	50~70L/min	
Rated Pressure	245kgf/cm ²		
Number of Knives	Sickle Knife		
Suggested Maximum Shredding Diameter	10mm	20mm	
Weight	90kg	110kg	250kg
Applicable Excavator	1.7~2.5ton	3~6ton	

Mulcher Models

EM600 / EM850 Mulchers are well suited for handling soft woods and trees, and also these machines are quite capable to work on overgrown grass and vegetation management.

*EM850 comes with a tilting function as a default, and this feature allows improved operation performance while handling trees and vegetation.



● EM600

● EM850

Model	EM 600	EM 850
Working Width	600mm	850mm
Flow	50~70L/min	120~150L/min
Rated Pressure	245kgf/cm ²	350kgf/cm ²
Number of Knives	Knife 10ea	Knife 14ea
Suggested Maximum Shredding Diameter	150mm	250mm
Weight	390kg	750kg
Applicable Excavator	5~10ton	13~15ton

Presenting Flail Mower / Shredder Models

Flail mowers and shredders from Woosung are high-performance machines that are attached to an arm of excavator. Our units allow fast cutting and shredding of a wide array of vegetations, not just limited to grasses or weeds, but overgrown shrubs as well. These excavator attachments offer and allow many advantages in comparison to conventional tractor mounted units that these excavator attached units are capable to approach some of challenging terrains such as hilly and steep slopes of orchards, grassland, drainage ditches, river banks, rural roads, railway tracks, highways, and narrow paths where regular vehicles or people have limited access.



Flail Mower Patent Registration: Patent Registration Number (In S. Korea, No. 10-1814522)



Sample photos of intended usage

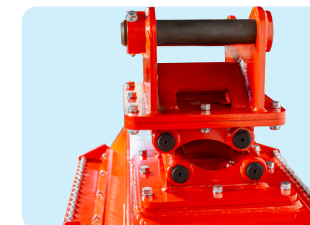
Key Features



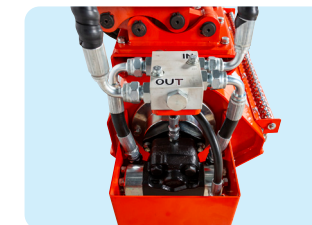
The main rotor is driven directly by a hydraulic motor.



Frame Structure: Light-weighted, but very sturdy design.



A mechanical float adaptor helps mowing operations more smoothly on uneven ground.



The hydraulic circuit design allows the diversion of hydraulic flow in case of a sudden pressure build-up, and such design feature helps to protect the hydraulic motor.



Our selection of knives are optimized for each model, and our knife designs intend to ensure long working hours.



Cup Knife



Set of 3 Knives



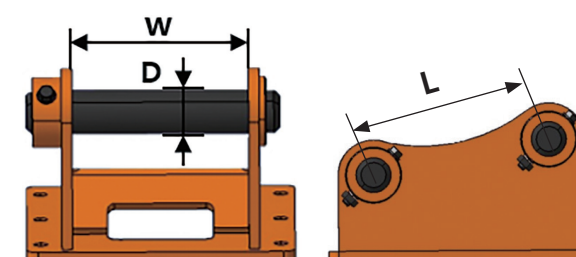
Flail Hammer

Specifications

*EF1300 does not come with a Mechanical Float Adaptor

Model	EF600	EF800	EF1100	EF1100S	EF1300
Working Width	600mm	800mm	1100mm		1300mm
Flow	30~40L/min	50~70 L/min			120~150L/min
Rated Pressure	245 kgf/cm²				
Number of Knives	3Knife: 22set	3 Knife type : 18set	3 Knife type : 26set	3Knife: 20set	3 Knife type : 22ea
	Cup Knife 22ea	Hammer : 18ea	Hammer : 26ea	Hammer: 20ea	
Suggested Maximum Shredding Diameter	15mm	20mm	30mm	50mm	70mm
Weight	85kg	170kg	230kg	300kg	550kg
Applicable Excavator	1.7~2.5ton	3~4.5ton	5~8ton		10~14ton

Available Mounting Bracket Designs and Corresponding Dimensional Specifications

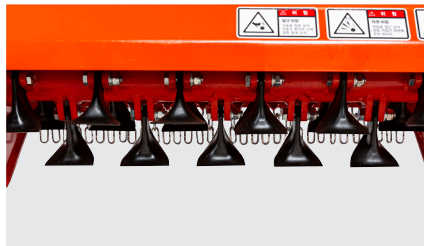


Type	D(mm)	W(mm)	L(mm)
A	25	100	92
B	30	125	125
C	30	125	105
D	35	150	180
E	40	145	190
G	45	174	271
J	50	200	307
H	65	280	400

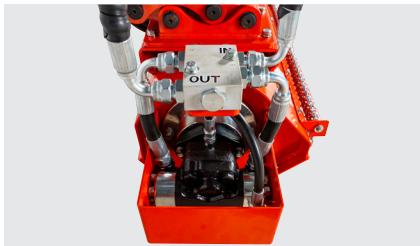
EF600

| Excavator Mounted Flail Mower |

EF600 is a high-performance hydraulic-driven flail mower, and it is optimized for mini-sized excavators under 2.5 metric tons. This unit is suitable and works best to shred grass and weeds or work on some shrubs. Its compactness will shine while operating in orchards, around drainage ditches, alongside of narrow paths, rural roads or highways, etc.



Knife assembly



Motor & Valve



Mechanical Float Adaptor

Specifications

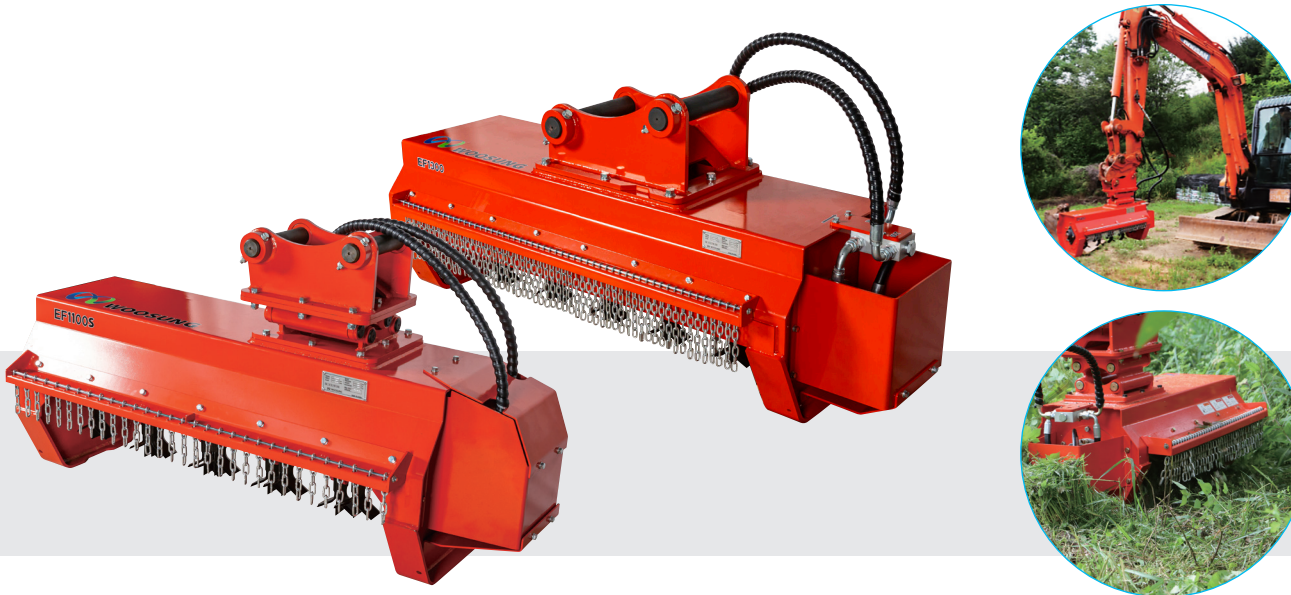
Model	EF600
Working Width	600mm
Flow	30~40L/min
Rated Pressure	245 kgf/cm ²
Number of Knives	3Knife: 22set Cup Knife 22ea
Suggested Maximum Shredding Diameter	15mm
Weight	85kg
Applicable Excavator	1.7~2.5ton

Product Information

EF800 / EF1100 / EF1100S / EF1300

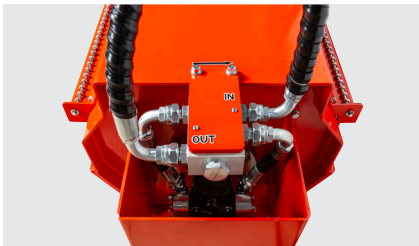
| Excavator Mounted Flail Mower |

EF800 / EF1100 / EF1100S / EF1300 are high-performance hydraulic-driven flail mowers, and these are designed for compact and small sized excavators. These units are intended for rapidly clearing and shredding of grass and weeds, undergrowth, and vegetation in various locations such as drainage ditches and river banks, around orchards and farms, and alongside of roads, highways, and railways, etc. Some models can be fitted with flail hammers to remove overgrown shrubs and perhaps work on woody vegetation.

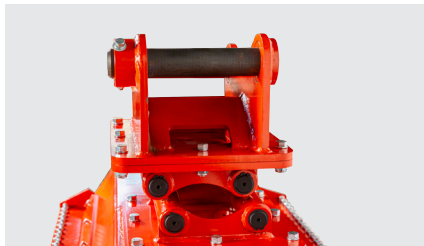


Knife Assembly

(shown with optional configuration)



Motor & Valve



Mechanical Float Adaptor

Specifications

* EF1300 does not come with a Mechanical Float Adaptor

Model	EF800	EF1100	EF1100S	EF1300
Working Width	800mm	1100mm		1300mm
Flow	50~70 L/min			120~150L/min
Rated Pressure	245 kgf/cm ²			
Number of Knives	3 Knife type : 18set	3 Knife type : 26set	3Knife: 20set	3 Knife type : 22ea
	Hammer : 18ea	Hammer : 26ea	Hammer: 20ea	
Suggested Maximum Shredding Diameter	20mm	30mm	50mm	70mm
Weight	170kg	230kg	300kg	550kg
Applicable Excavator	3~4.5ton	5~8ton		10~14ton

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Excavator Mounted Trimmer

Our **ET series trimmers** are the product designed to trim hedges, bushes, grass, weeds, and perhaps pruning vines as well.



Sample photos of intended usage

Key Features



ET1200 TILTING:
This particular model can rotate the tilting angle 360 degrees.

01



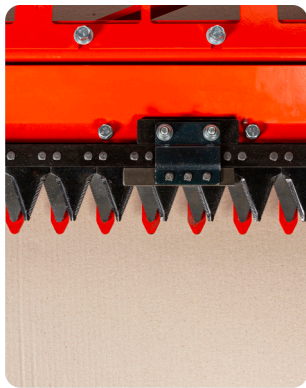
Lightweight, but very solid frame structure.

02



A rotating cam allows the reciprocating motion of the sickle assemblies.

03



Our uniquely designed sickle sections ensure excellent cutting performance and a long service life.

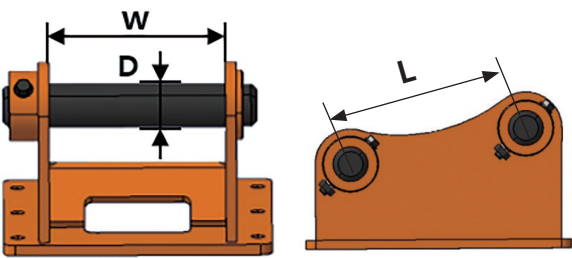
04

Specifications

* **ET1200TILTING** can operate while the main body rotates 360°

Model	ET 1200MINI	ET 1200	ET 1200 TILTING
Working Width	1200mm		
Flow	30~40L/min	50~70L/min	
Rated Pressure	245kgf/cm ²		
Number of Knives	Sickle Knife		
Suggested Maximum Shredding Diameter	10mm	20mm	
Weight	90kg	110kg	250kg
Applicable Excavator	1.7~2.5ton	3~6ton	

Available Mounting Bracket Designs and Corresponding Dimensional Specifications



Types	D(mm)	W(mm)	L(mm)
C	30	125	105
B	30	125	125
E	40	145	190
G	45	175	271

Excavator Mounted Mulcher

Woosung's EM series mulching machines are hydraulic driven attachment that mounted to the arm of an excavator. Such configuration gives much greater advantage on managing and clearing trees/overgrown vegetations, where regular vehicles may face some difficulty to get access.



EM600

EM850



EM600

Suitable for excavators of 5 to 6 metric tons range.



EM850

Suitable for excavators of 13 to 15 metric tons range.



Some of working images of EM series

Key Features



Equipped with a timing belt drive.

01



A tilting device enables to tackle the working objects more efficiently (Standard featured in EM850)

02

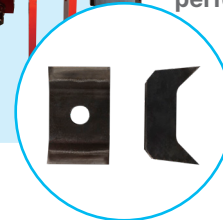


A case drain hose is also one of important features on Our EM series Mulchers, and this ensures to protect the hydraulic motor by diverting sudden buildup of hydraulic pressure to the main reservoir.

03



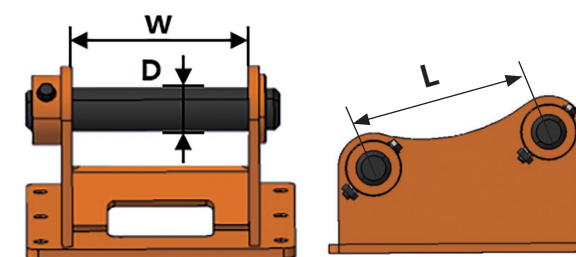
Comes with very durable chipping axes of excellent cutting performance.



04

Specifications

Model	EM 600	EM 850
Working Width	600mm	850mm
Flow	50~70L/min	120~150L/min
Rated Pressure	245kgf/cm ²	350kgf/cm ²
Number of Knives	Knife 10ea	Knife 14ea
Suggested Maximum Shredding Diameter (on soft woods)	150mm	250mm
Weight	390kg	750kg
Applicable Excavator	5~10ton	13~15ton



Available Mounting Bracket Designs and Corresponding Dimensional Specifications

Types	D(mm)	W(mm)	L(mm)
G	45	175	271
J	50	200	307
H	65	280	400

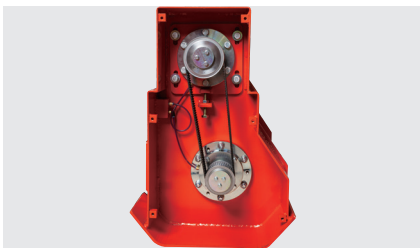
EM600

| Excavator Mounted Mulcher |

EM600 Mulcher is an excavator attachment, and this unit is ideal to work and operate on difficult and challenging terrains where an excavator has no problem entering into. **EM600 Mulcher** can be mounted to compact excavators of 5 to 6 metric ton range, and a great choice to tackle trees (under 150 mm or 6" in diameter) or overgrown vegetation.



Knife Assembly Configuration



Timing Belt System



A Case Drain to Protect Hydraulic Motor

Specifications

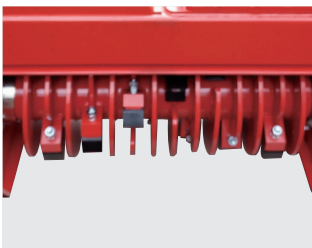
Model	EM 600
Working Width	600mm
Flow	50~70L/min
Rated Pressure	245kgf/cm ²
Number of Knives	Knife 10ea
Suggested Maximum Shredding Diameter (on soft woods)	150mm
Weight	390kg
Applicable Excavator	5~10ton

Product Information

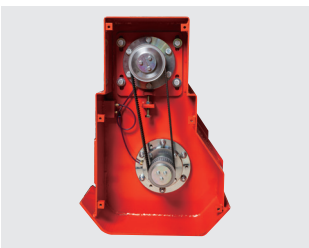
EM850

| Excavator Mounted Mulcher |

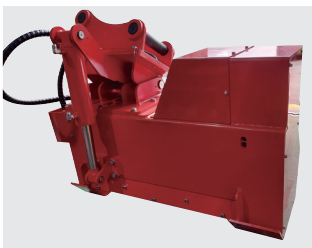
EM850 Mulcher is an excavator attachment, and this unit is ideal to work and operate on difficult and challenging terrains where an excavator has no problem entering into. **EM850 Mulcher** can be mounted to excavators of 13 to 15 metric ton range, and a great choice to tackle trees (under 250 mm or 10" in diameter) or overgrown vegetation. In addition, the tilting function is added onto EM850 as a standard feature; this increases the work efficiency greatly while tackling trees and overgrown vegetation.



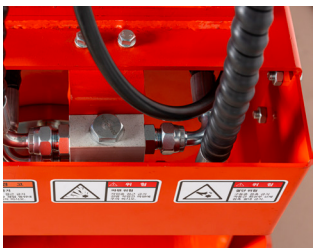
Knife Assembly Configuration



Timing Belt System



Tilting System



A Case Drain to Protect Hydraulic Motor

Specifications

Model	EM 850
Working Width	850mm
Flow	120~150L/min
Rated Pressure	350kgf/cm ²
Number of Knives	Knife 14ea
Suggested Maximum Shredding Diameter (on soft woods)	250mm
Weight	750kg
Applicable Excavator	13~15ton

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Assembly and Disassembly Instruction / How to Replace Knives

How to attach and detach the working unit



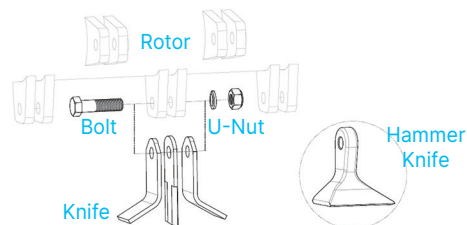
* Operate the working attachment in hydraulic breaker mode. If the excavator does not have a hydraulic breaker mode, you must install a separate discharge pipe.

* If couplers are not installed on the excavator's hydraulic hoses, you can use intermediate hose assemblies for the connection

Replacing Method for Knives

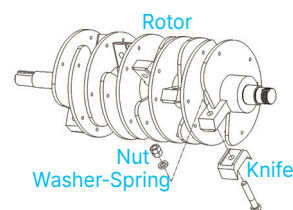
Procedure for Replacing the Flail Mower Knives

Assemble the knife set on the order shown in the diagram.
(Assembly diagrams for Flail Knife Set and Flail Hammer are shown side by side.)



Procedure for Replacing the Mulching Knife (Axe)

Sharpen the knives (axes) in a regular interval, and replace worn knives when the sharpening of knives (axes) is no longer effective; failure to do so will cause the machine to malfunction or be broken down. Replace the knife, bolt, and washer in the manner as described in the diagram below.



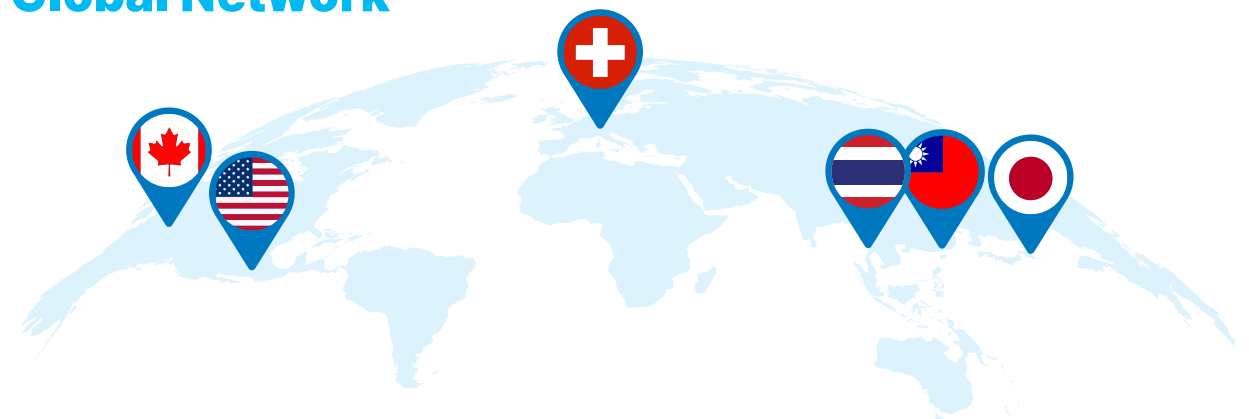
***Trimmer Models** may require frequent sharpening of the sickle sections, and replace the entire sickle section assembly, if necessary, when the serrations on the sickle sections are worn beyond the point of effective sharpening.

Product Information

Certifications and Global Sales Network Certification



Global Network



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