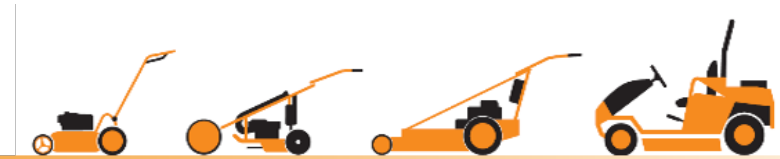




AS-Motor Ride-On Flail Mower

Product Presentation – AS 1040 Yak 4WD



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AS 1040 Yak 4WD – table of contents

Table of contents



Tip: You can navigate in the document via mouse-over click – click page number and click www.as-motor.de to return to the table of contents.

AS 1040 device concept

- Main features and main arguments p. 4
- Device structure p. 5
- Application area p. 6

AS 1040 engine

- Overview p. 8
- Engine technology p. 9
- Air filter / engine oil p. 11
- Fuel tank p. 12

AS 1040 drive

- Overview p. 14
- Rear axle p. 15
- Front axle p. 16
- Hydrostatic transmission p. 17

AS 1040 mower deck

- Overview p. 19
- Blade system / grass placement p. 20
- Suspension / height adjustment p. 22

AS 1040 operating elements

- Overview p. 25
- Overview of operating characteristics p. 26
- Seat / seat spring package p. 28
- Cutting height adjustment / drive lever p. 29

AS 1040 accessories / technical data

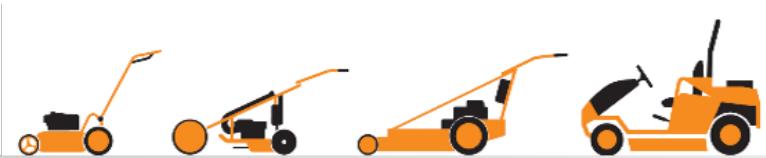
- Accessories p. 31
- Technical data p. 32

AS 1040 Yak 4WD device concept

Main features and main arguments

Device structure

Application area / target groups



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AS 1040 Yak 4WD device concept

Main features and main arguments 1/1



Highest operating comfort

- Upright sitting position and ample legroom
- New AS seat spring package with scale as standard
- Weight optimized construction with rigid square steel frame. Only 335 kg !

Maximum slope fitness

Permanent 4-wheel drive with "intelligent" front axle



Foldable bracket and side deflectors

One-hand control with cruise control without additional brake pedal

Professional Vanguard V-Twin engine, 627 ccm, 23 PS max., fully slopeable, 3 years professional warranty

Standard tyres with AS puncture protection

Professional and robust

Asymmetrical 100 cm flail mower with double-sided Y- flails and quick service openings

Flail mower - Safety in case of collision with foreign bodies

Surfing mowing deck, swerves upwards when riding up

Extremely low centre of gravity due to low design

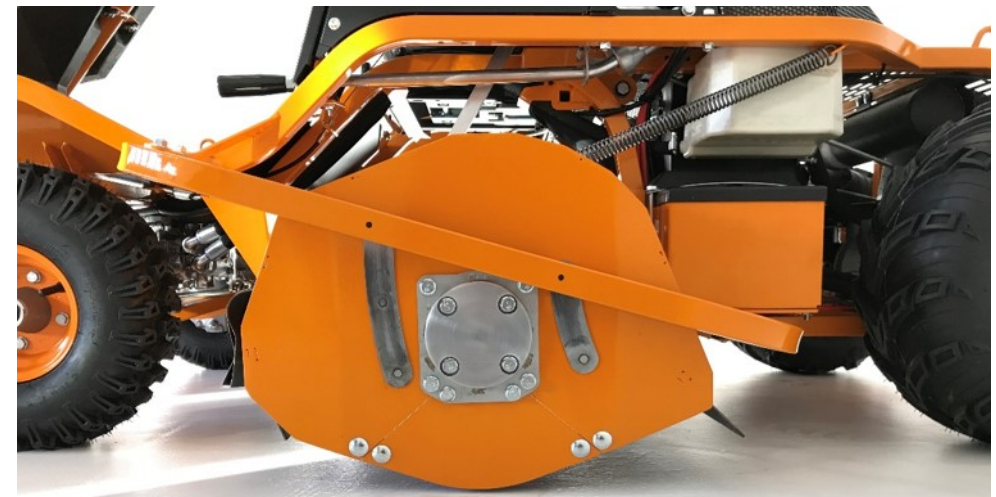
30% more area performance than a comparable rotary mower

AS 1040 Yak 4WD device concept

Device structure 1/1



- Extremely stable, self-supporting square steel tubular frame construction
- Vehicle frame of steel – galvanised and powder-coated
- Extremely low and lightweight design for optimal suitability on slopes and optimal climbing capacity
- Folding rollover bar – positive-fit construction for maximum safety
- Completely new vehicle concept for hitherto unattained mulching capacity on rough terrain



- ✓ A totally new development
- ✓ Good handling thanks to lightweight design
- ✓ Extremely low vehicle centre of gravity
- ✓ High-quality materials for the utmost stability
- ✓ Robust professional machine

AS 1040 Yak 4WD device concept

Application areas 1/1



AS PRODUCTS

Maximum work rate
in m²/hour (V_{Max} x cutting width)

Maximum undergrowth height
in cm

RIDE-ON MOWER

AS 1040 YAK 4WD

6.800

150

AS PRODUCTS

Gradient suitability
Level > rising > very steep

Professional
use

Mowing deck

Drive

RIDE-ON MOWER

AS 1040 YAK 4WD



Mulching with flail

All-wheel drive hydrostatic

■ Suitable

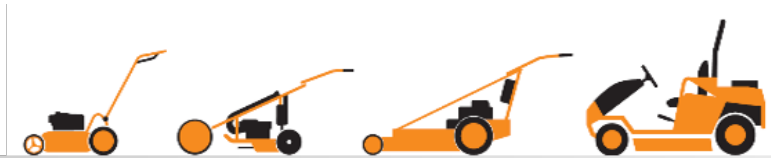
■ Recommended

AS 1040 Yak 4WD engine

Overview

Engine technology

Fuel tank



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AS 1040 Yak 4WD engine

Overview 1/1



- Briggs & Stratton 4-stroke, V-Twin 2-cylinder OHV engine, Vanguard 3864 with 627 ccm displacement and 21,1 hp (15.5 kW) rated power and 23 hp (17.2 kW) maximum power at 3600 rpm
- Mid-mount engine technology
- Horizontal crankshaft with 28 mm diameter for optimal transmission of force to the mower unit
- High-performance cyclone air cooler
- High tank volume (15-litres)



- ✓ Engine is suitable for working on steep slopes
- ✓ High power reserves for deployment on rough terrain
- ✓ Outstanding accessibility for maintenance tasks
- ✓ Optimal cooling and cyclone air filter guarantee long service life of the engine in the toughest operating conditions
- ✓ High-volume fuel tank for long work deployments and high operational reliability

AS 1040 Yak 4WD engine

Engine technology 1/2



- High torque of 47 Nm at 2,900 rpm
 - V-Twin cylinder engine – minimal vibration and high fuel efficiency
 - Pressure lubrication and oil filter
 - Electric starter and large battery for reliable starting
 - Double ball bearing for additional durability of the engine
 - Outstanding accessibility for maintenance
 - Briggs & Stratton ensures a 3-year guarantee
- ✓ OHV – optimised power, long service life of the engine at minimal oil consumption
 - ✓ Optimised engine cooling for consistent high performance
 - ✓ Suitable for slopes thanks to pressure lubrication
 - ✓ Low emissions and minimal fuel consumption
 - ✓ Magnetron® electronic ignition system – ensures easy start and it is maintenance-free



AS 1040 Yak 4WD engine

Engine technology 2/2



- Horizontally installed mid-mount engine
- Direct force transmission to the mower unit
- Forged 28 mm thick crankshaft
- Cast-iron cam shaft
- Grey cast-iron liner for long engine service life and minimal oil consumption
- Reduced fuel consumption



- ✓ Mid-mount engine for optimal vehicle centre of gravity and optimal traction on difficult terrain
- ✓ Minimal power losses through horizontal installation
- ✓ Robust crankshaft
- ✓ Outstanding quiet operation
- ✓ Long service life and long maintenance intervals

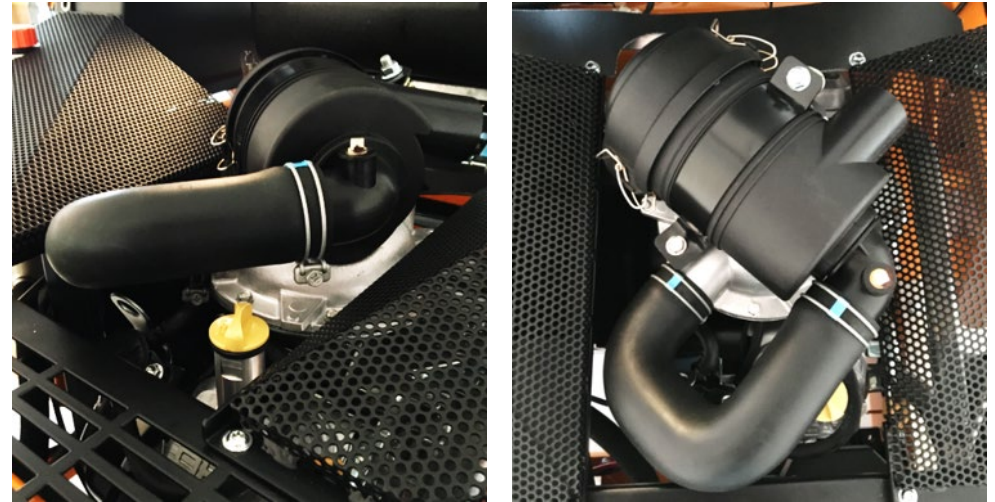


AS 1040 Yak 4WD engine

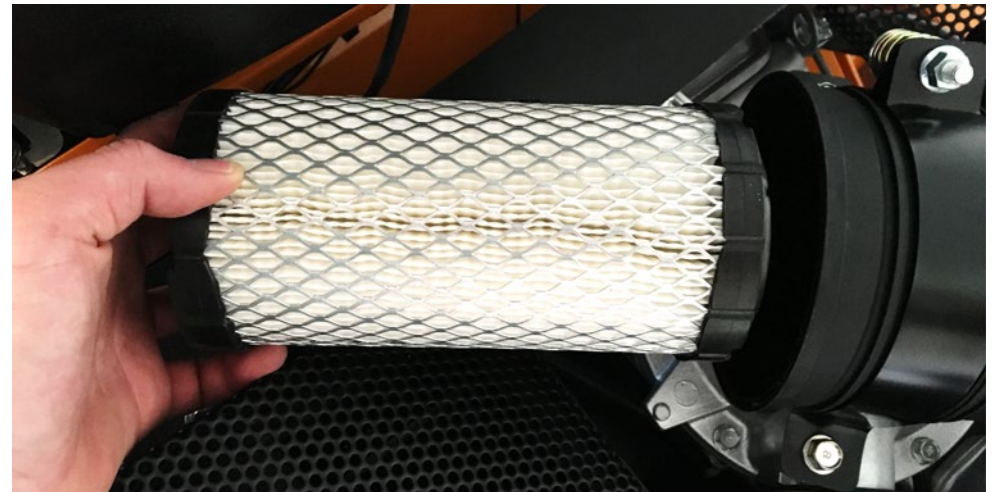
Air filter / engine oil 1/1



- High-performance cyclone air filter – effective mowing in demanding work environments
- Optimal cleaning of the intake air for high performance and long service life of the engine
- Easy accessibility for cleaning and maintenance



- ✓ Optimal protection against contaminated air in the engine for continuous high performance
- ✓ Uncomplicated execution of maintenance and cleaning tasks
- ✓ High temperature range of the engine oil
- ✓ Long maintenance intervals



AS 1040 Yak 4WD engine

Fuel tank 1/1



- Tank capacity: 15-litres normal petrol
- Separation of tank and engine for optimised weight distribution
- Funnel shape with removal at the lowest point of the tank and reserve function (1 litre)
- Ergonomically shaped for maximum legroom



- ✓ Funnel shape for complete emptying of the fuel, even on the slope
- ✓ Reserve function for high operational reliability
- ✓ Optimal weight distribution
- ✓ Thanks to the clear separation from the engine there is no heat load of the tank / fuel



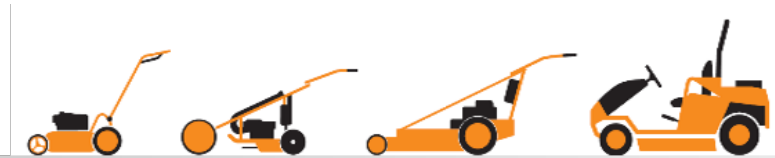
AS 1040 Yak 4WD Drive

Overview

Rear axle

Front axle

Hydrostatic transmission



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AS 1040 Yak 4WD drive

Overview 1/1



- Permanent 4WD
- High-performance hydrostatic transmission
- Limited-slip differential
- Tight turning radius and automatic straight-ahead course
- Front axle with pendulum bearing support for good ground tracking
- Integrated parking brake
- Rear ATV tyres and front Snow-Grip Tyres



- ✓ Hydrostatic transmission with high-performance cooling
- ✓ Outstanding climbing capacity
- ✓ Optimal traction and directional stability through 4-wheel drive and limited-slip differential
- ✓ Continuous ground contact and minimal slip
- ✓ High safety through integrated parking brake
- ✓ The proven drive system of the AS Sherpa
- ✓ Improved ramp angle

AS 1040 Yak 4WD drive

Rear axle 1/1



- Robust rear axle with hydrostatic transmission und limited slip differential
- Automatic parking brake / safety brake at zero position of the drive lever
- Tyres: ATV (All-Terrain Vehicle) 18x9.50-8
- Speed, forward: 0 - 6.8 km/h
- Speed, reverse: 0 – 6.3 km/h



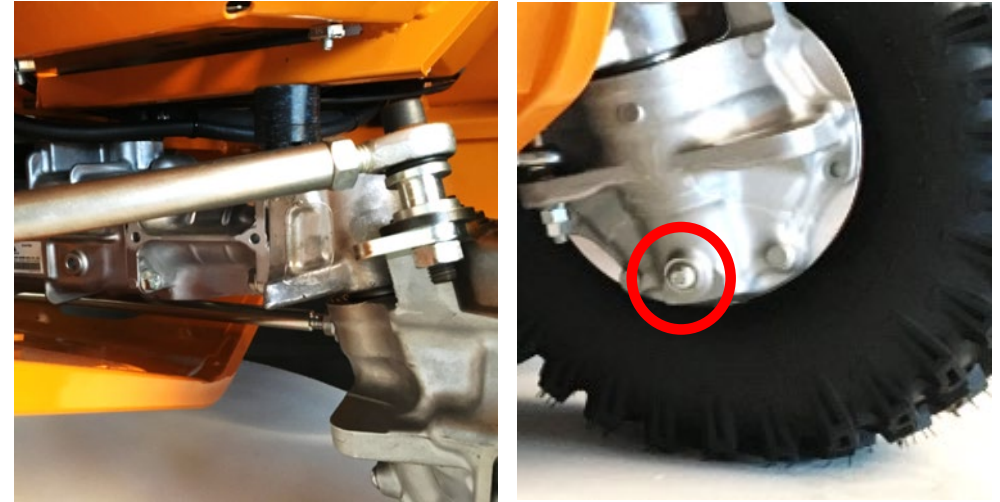
- ✓ Optimal traction on any terrain
- ✓ Safe stopping / parking and start-up of the vehicle, especially on the slope
- ✓ Problem-free continuous use thanks to low transmission oil temperature through the adapted speed
- ✓ Robust drive configuration for continuous use in harsh conditions

AS 1040 Yak 4WD drive

Front axle 1/1



- Portal front axle with pendulum bearing support
- Permanent 4-wheel drive via hydrostatic transmission
- Tyres: SC (Snow-Grip) 15x5.00-6
- Bolted protective front bracket under the front axle – better protection of the tie rod and steering rod on rough terrain
- Hydrostatic transmission oil drain screw designed as internal Torx fillister head screw – protects against oil loss due to screw damage at contact with kerbstones, etc.



- ✓ Continuous ground contact through pendulum axle
- ✓ Optimal traction through all-wheel drive and professional tyres
- ✓ Extreme suitability for slopes thanks to optimal weight distribution
- ✓ Robust collision guard, easy to replace
- ✓ Maximum service life and maintenance-friendly

AS 1040 Yak 4WD drive

Hydrostatic transmission 1/1



- Robust rear axle with hydrostatic transmission und limited slip differential
- Cooling air supply of the transmission is separated from the engine
- Easy access to unlock the transmission
- Integrated emergency brake / parking brake - disc brake + zero position spring, purely mechanical
- Good accessibility to the hydraulic oil reservoir
- High performance at low weight



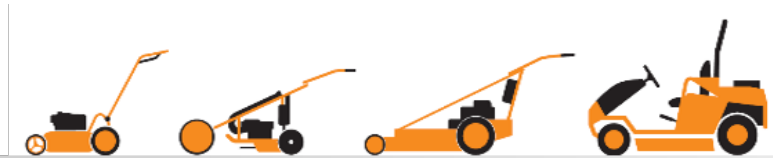
- ✓ Optimal cooling for intensive continuous use without overheating and transmission damage
- ✓ Easy unlock for moving the machine in enclosed spaces without the engine running
- ✓ High safety through integrated / automatic brake
- ✓ 100% braking capacity, even when the engine is not running

AS 1040 Yak 4WD mower deck

Overview

Blade system / grass placement

Suspension / height adjustment



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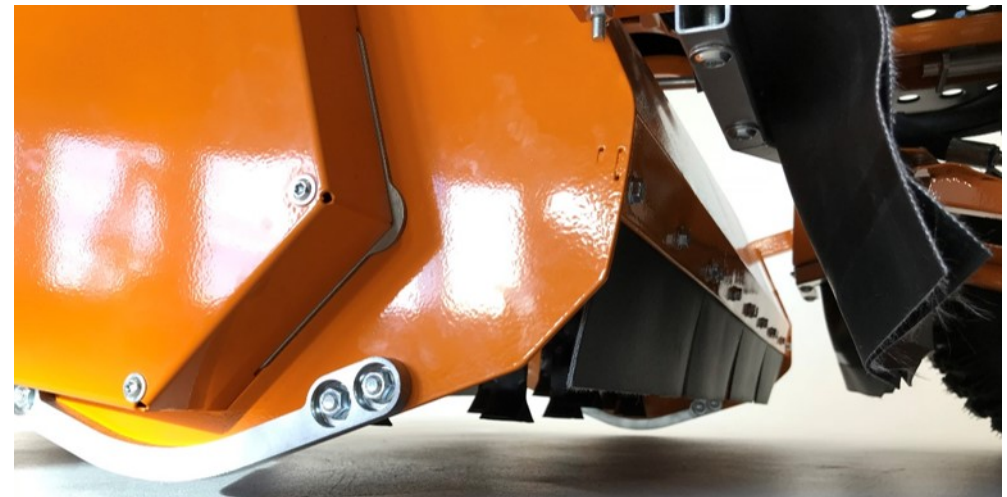
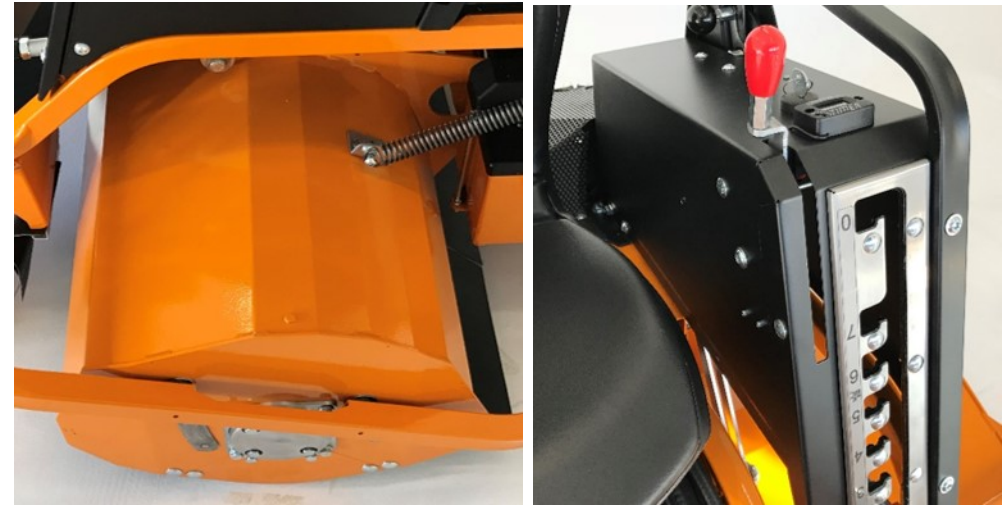
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AS 1040 Yak 4WD mower deck

Overview 1/1



- Powerful mid-mount steel flail mower deck
- Robust design for demanding terrain
- 100 cm working width with Y-flails that can be used on both sides, large-dimensioned flail shaft
- Surfing mower deck suspension
- Manual, 7-level central cutting height adjustment
- Mulch placement over the entire working width
- Lateral offset for precise mowing in edge areas



- ✓ Theoretical work rate up to 7000 m²/h also in high and woody growth
- ✓ Minimal susceptibility to damage through surfing suspension and oscillating Y-flails
- ✓ Extremely clean mulching result
- ✓ Efficient mow-out of obstructions and edge areas
- ✓ High safety for operator and environment

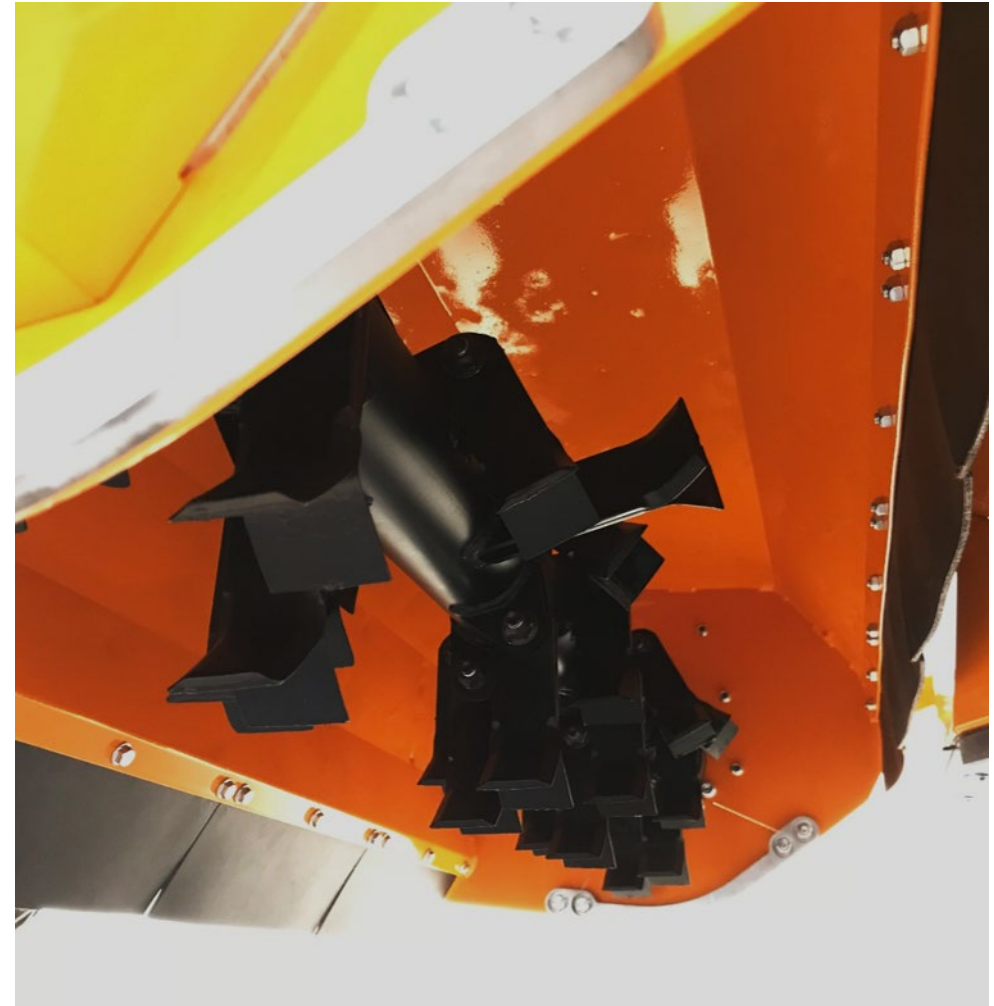
AS 1040 Yak 4WD mower deck

Blade system / grass placement 1/2



- Incredible performance through the combination of flail mower unit and ride-on mower
- 100 cm cutting width, 56 Y-flails (28 sets), can be used on both sides, 5 mm thickness
- Y-flails give way to obstructions and foreign objects
- Shreds growth to 150 cm into fine mulch
- Large-dimension, balanced flail shaft
- Uniform mulch placement over the entire working width
- Highly-efficient work, 40% higher work rate at same petrol consumption

- ✓ Highest work rate up to 6.800 m²/h through a large working width and high drive speed
- ✓ Shreds growth of several years into a fine mulch
- ✓ Higher performance than any rotary mower deck
- ✓ Broad application spectrum
- ✓ Robust, impervious design for mowing in harsh conditions

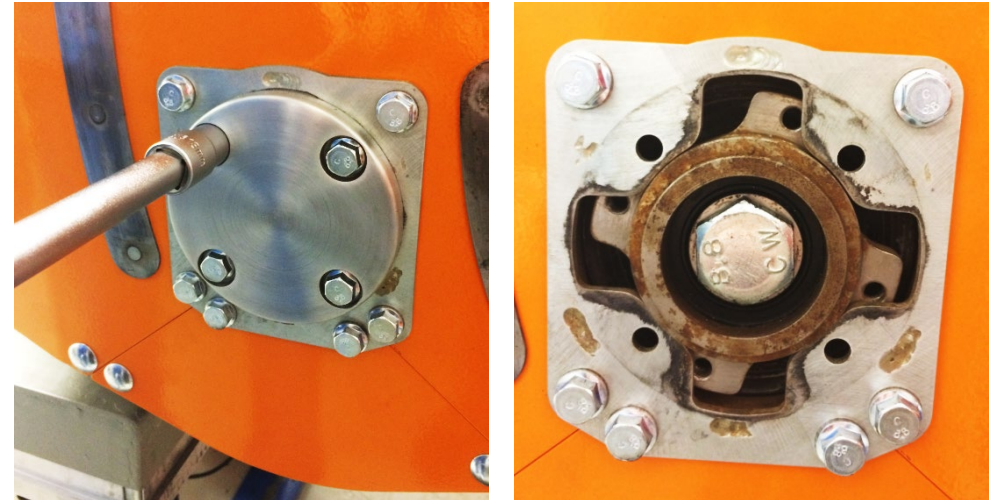


AS 1040 Yak 4WD mower deck

Blade system / grass placement 2/2



- Good accessibility to the flail shaft bearing
- Bearing can be replaced without removal of the flail shaft
- Fast removal of the flail shaft
- Flail shaft emergency stop via engine switch in the seat
- Adjustable end position of the mower deck – adapts to the terrain and to the user
- End-position damping of the mower deck



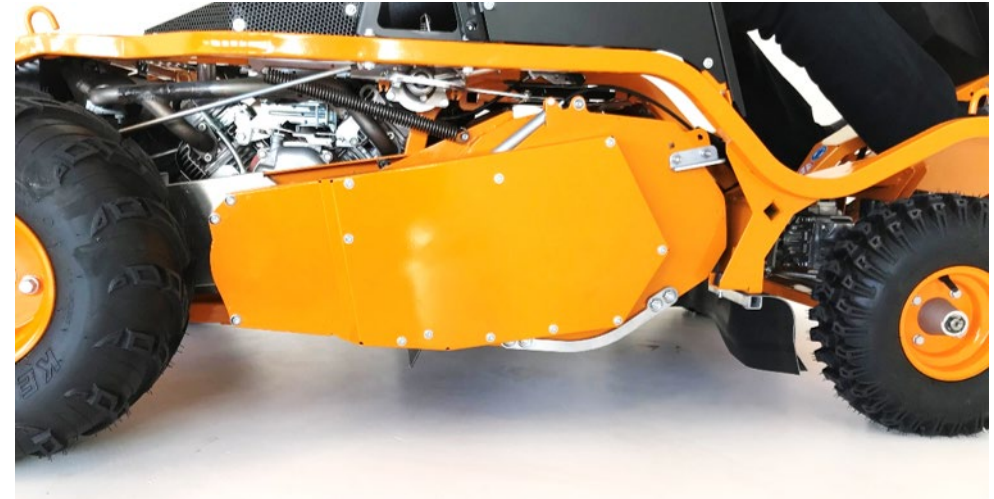
- ✓ Good accessibility
- ✓ Extremely service friendly
- ✓ Greatest possible safety through emergency stop function
- ✓ Robust flail mower deck with end-position adjustment – ideal on unfamiliar terrain

AS 1040 Yak 4WD mower deck

Suspension / height adjustment 1/2



- Surfing mower deck suspension
- Manual central height adjustment in 7 levels
- Ease of motion through special kinematics
- Cutting height: 30-110 mm; transport position: 140 mm
- Possible to work close to the ground, directly above the turf
- It is not possible to start the mower unit in transport position
- Exhaust air of the engine generates excess pressure in the V-belt box – reduced contamination and deposition of dust



- ✓ Mower deck can give way upwards – neither machine nor turf are damaged when driving over uneven areas and hilltops
- ✓ Lift-out of the mower deck with minimal expenditure of force
- ✓ Cutting height adjustment on any terrain
- ✓ High operator safety when moving or loading

AS 1040 Yak 4WD mower deck

Suspension / height adjustment 2/2



- Asymmetric mower unit suspension
- Lateral offset of the mower deck in the direction of movement left
- Efficient mow-out of edge areas and obstructions
- In addition to large-area on open terrain, clean-out tasks are also possible
- Precise parallel tracking due to an outstanding overview over the mower deck



- ✓ High precision when working in edge areas and around obstructions
- ✓ Good overview over the mower unit.
- ✓ Suitable for clean-out tasks
- ✓ Less tyre damage thanks to a safety distance to edges and thorns

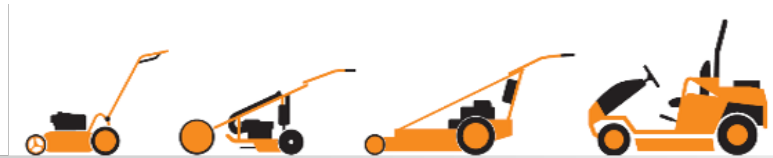
AS 1040 Yak 4WD operating elements

Overview

Overview of operating elements

Seat / seat spring package

Drive lever / throttle lever



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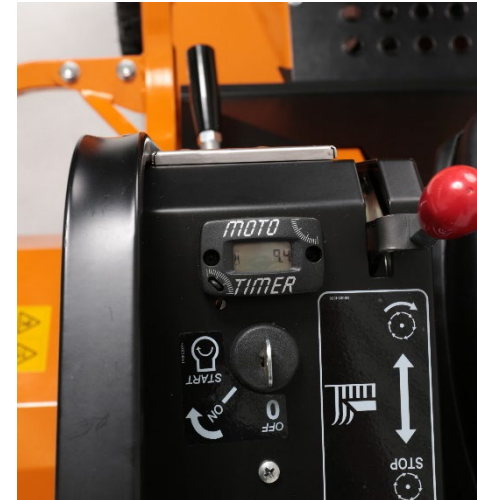
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AS 1040 Yak 4WD operating elements

Overview 1/3



- Adjustable, comfortable bucket seat
- Ergonomic sitting position deep in the machine
- Maximum legroom and freedom of movement through flattened steering wheel and narrow tank shape
- Logical arrangement of all operating elements
- Cruise control function of the drive lever – stopping is not necessary
- Height adjustment of the mower deck with minimal expenditure of force through special kinematics



- ✓ Safe drive feel thanks to low seat position and support possibilities for the feet
- ✓ Intuitive operation of all operating elements
- ✓ High-level user-friendliness through ergonomic arrangement of all elements
- ✓ The proven driving comfort of the AS Sherpa cleverly further developed

AS 1040 Yak 4WD operating elements

Overview of operating elements 2/3



- Foot pedal limited-slip differential
- Cutting height adjustment
- Mower unit engagement
- Operating hour meter
- Ignition lock



- Tank filler neck
- Foot pedal emergency brake (moves drive lever into middle position)
- Steering wheel in AS-design
- Drive lever / cruise control

AS 1040 Yak 4WD operating elements

Overview of operating elements 3/3



- Factory-standard operating hour meter
- Easily accessible battery box, protects against contamination and is easy to open
- Cladding for protection of the drive lever
- Helpful features in harsh mowing operation



AS 1040 Yak 4WD operating elements

Seat and seat spring package 1/1



- Variable-adjustment bucket seat with innovative suspension system and end-position damping
- Ergonomic sitting position, regardless of body size and build.
- Easy adjustment forward and back
- Individual adjustment of spring stiffness to the weight of the driver



- Bucket seat for optimum lateral hold on the slope
- Adjustment of the sitting position with a new scale (1-5) for convenient adjustment
- Adjustment of spring stiffness
- Adjustment of the sitting position

AS 1040 Yak 4WD operating elements

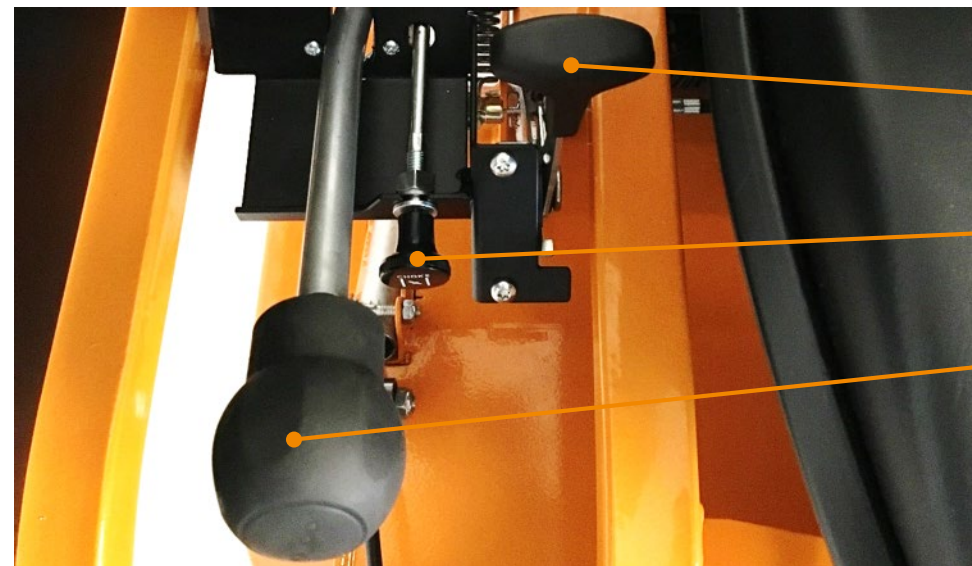
Cutting height adjustment / drive lever 1/1



- Mower unit engagement
- Cutting height adjustment
- Cladding for protection of the drive lever



- Rollover bar locking mechanism
- High-quality, low-wear stainless steel panel

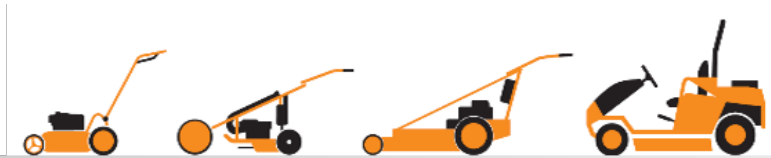


- Throttle lever
- Choke
- Drive lever

AS 1040 Yak 4WD accessories / technical data

Accessories

Technical data



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AS 1040 Yak 4WD - accessories

Overview 1/1



Accessories

AS 1040

Trailer	X
Adapter for trailer	X
Steering wheel knob	X
Inclinometer	X

AS 1040 Yak 4WD - technical data

Engine / drive / mower deck 1/3



Model	AS 1040
Engine	
Engine, design	2-cyl, 4-stroke OHV engine
Manufacturer	Briggs & Stratton
Type	Vanguard V-Twin 3864 with strong crankshaft 28 mm
Displacement in cm ³	627
Rated power (kW / hp)	15.5 / 21.1
Max. power (kW / hp)	17.2 / 23.0
Engine speed in rpm	3600
Starting device	Electric start
Drive	
Traction drive, type	Permanent 4WD

Model	AS 1040
Drive, rear	Hydrostatic transmission with limited-slip differential
Drive front	Pendulum axle with two hydraulic motors
Forward speed in km/h	0 - 6.8
Reverse speed in km/h	0 - 6.3
Turning radius in meters	1.4
Mower deck	
Cutting direction, type	Flail mower deck with 56 Y-flails, usable on both sides
Cutting width in cm	100

AS 1040 Yak 4WD - technical data

Mower deck / dimensions / fill quantities 2/3



Model	AS 1040
Cutting height in mm	30 - 110
Transport position in mm	120
Transport position surfing in mm	140
Number of levels	7
Drive, cutting tool	V-belts
Clutch, cutting tool	Belt clutch
Grass height up to approx. (cm)	150
Dimensions and weights	
Weight in kg	335

Model	AS 1040
Operating dimensions L/W/H in cm	199 / 122 / 159
Height with rollover bar folded in cm	108
Max. trailing load in kg	100
Max. drawbar load in kg	50
Fill quantities	
Fuel tank (litres / type)	15 / normal petrol
Engine oil (litres / type)	1.7 / 5W-50
Transmission oil (litres / type)	6.7 / 5W-50

AS 1040 Yak 4WD - technical data

Emissions / tyres / miscellaneous 3/3



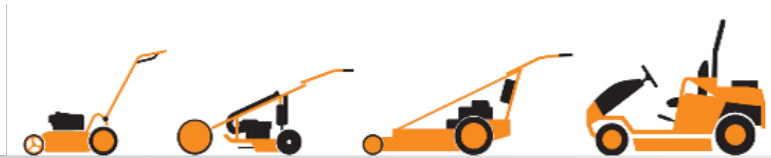
Model	AS 1040
Emissions	
Measured sound power level LwA (dB in accordance with DIN EN 12733)	102,6
Sound power level at the operating station LpA (dB in accordance with DIN EN 12733)	92,7
Measurement uncertainty k (dB (A))	3,0

Model	AS 1040
Tyre designation	
Front	15x5.00-6
Rear	18x9.50-8
Stability, transverse (in accordance with the standard measurement method)	20°
Housing	Steel



AS-Motor Ride-On Flail Mower

Thank you for your attention!



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