

# Grooming Mowers

**FRONTIER**



Economy • Standard-Duty • Medium-Duty • Flex-wing

# Mow like a pro

Whether you are mowing your lawn, sports field or public area, the quality of your work is on display for all to see. Frontier Equipment offers a broad line of grooming mowers that keep grass looking its best.

Select an economy, standard-duty, medium-duty or flex-wing mower that fits your job and budget. Reinforced steel decks stand up to rugged terrain, and gearboxes are engineered for long life and quiet operation. Solid rubber tires on the economy model and your choice of solid or pneumatic tires on the others maintain a consistent cut.

Our engineers paid attention to the smallest details, so you don't have to. For example, wheel caster spacers can easily be adjusted to raise or lower cutting height. Heat-treated alloy steel blades provide maximum performance in a wide range of conditions. And a high blade-tip speed and precise blade overlap combine for a cleaner cut.

Every Frontier Grooming Mower is backed by a 1-year residential warranty<sup>1</sup>. Find out more at your local John Deere dealer, your exclusive source for Frontier Equipment.

<sup>1</sup>Hour and/or usage limitations may apply. See WARRANTY FOR NEW JOHN DEERE AGRICULTURAL EQUIPMENT AND LIMITED WARRANTY FOR NEW TURF & UTILITY EQUIPMENT or contact your local dealer for details.

[www.BuyFrontier.com](http://www.BuyFrontier.com)  
[www.BuyFrontier.ca](http://www.BuyFrontier.ca)

## 3-point Mowers

### Standard-duty 20 Series Grooming Mowers

GM2060, GM2072, GM2084



The standard-duty GM20 Series is a rear-discharge, three-spindle mower. Each model can be rear mounted and is adjustable to cutting heights of 1 to 5 inches (2.5-12.7 cm). A floating 3-point iMatch™<sup>2</sup> compatible linkage (Category 1), optional with conversion kit,<sup>3</sup> and heavy-duty shielded PTO shaft make connections a breeze.



GM20 Series Mowers (pictured) have five blade options: standard, low-lift, high-lift, mulching and gator. The GM2190 and GM2109 have two free-swinging blades per rotor.

<sup>3</sup>Available at additional cost.



## Medium-duty 21 Series Grooming Mowers

GM2190, GM2109



The medium-duty GM21 Series is the wider and heavier version of our rear-discharge, three-spindle mowers. Rear mounted, it's adjustable to cutting heights of 1.3 to 5.3 inches (3.3-13.5 cm). A front anti-scalping roller helps prevent scalping, while six free-swinging kickback blades make the medium-duty GM21 Series ideal for commercial use.



Frontier GM20 and GM21 Series grooming mowers can be fitted with the John Deere iMatch system. iMatch<sup>2</sup> converts your tractor's 3-point hitch to fixed hooks and attaching points for a super-quick connection. (iMatch hitch and implement A-frame kit<sup>3</sup> sold separately.)

**iMatch™**



The rugged deck-mounted gearbox on the GM20 Series feature spiral gears to dramatically reduce noise, increase endurance, and transfer more power to the cutting blades.



Anti-scalping rollers are standard on GM2084, GM21 Series, FM20 Series, and FM21 Series Mowers. They are optional<sup>3</sup> on GM10E Series, GM2060, and GM2072.



Stamped wheel yokes with pneumatic tires have spacers for quick and easy height adjustments.



# Flex your muscles for larger mowing jobs

Cover more grass in fewer passes with Frontier Flex-Wing Mowers, which have cutting widths of up to 20 feet (6.1 m). The high blade speeds and flexibility of the FM20 and FM21 Series mowers result in a professional-quality finish.

Telescoping wings enable the operator to adjust cutting widths to increase or decrease mower overlap on sloping terrain. Decks are mounted independently of the frame for maximum flexibility, and high-flotation transport tires mean less pressure on the ground.

Flex-Wing Mowers are as maneuverable on the road as they are in the field. Hydraulic folding wings, as well as standard safety features, provide a narrow profile during transport.

[www.BuyFrontier.com](http://www.BuyFrontier.com)  
[www.BuyFrontier.ca](http://www.BuyFrontier.ca)



## Flex-Wing Mowers

### Standard-Duty 20 Series Flex-Wing Mowers

FM2012, FM2015, FM2017



The FM20 and FM21 Series Mowers have the same rugged decks. The size of the FM20 Series makes it ideal for smaller operations. The FM20 Series frame also is short and compact for transporting.



The FM20 and FM21 Series Flex-Wing Grooming Mowers feature heavy-duty frames and high flotation tires for transport. A single-action hydraulic folding wing system makes transport simple, while a SMV sign, transport safety chain, and lights are standard.

# Medium-Duty Flex-Wing Mowers

FM2112, FM2115, FM2117, FM2120



*Spindle shafts grease from the top for quick and easy service.*

*Decks float freely 4 inches (10.16 cm) front-to-rear and left-to-right to closely follow ground contours.*

The 21 Series mowers, with their heavy-duty steel frames, are especially well-suited for use by commercial mowing operations or facility maintenance departments.



The hydraulic unlock system field conversion kit<sup>3</sup> allows the operator to unlock the wings from the tractor seat with the convenience of their hydraulic lever. It replaces the standard rope disengagement that comes with the flex-wing mower. The hydraulic unlock system is ideal for operators who fold and unfold the unit frequently to go from job to job.

<sup>3</sup>Available at additional cost.



Cutting-height adjustments are fast and easy. Because pneumatic tires create less downward pressure, they are ideal for mowing golf courses and sports fields.



Adjust the telescoping wings to obtain the cutting width and mowing overlap you need. Simply remove the retaining bolts and roll the wings to the desired position.



The FM21 Series Grooming Mowers feature rugged mower deck gearboxes with spiral gears that significantly reduce noise, increase endurance, and transmit more power to the cutting blades.



# Specifications

## Economy Grooming Mowers

Model Number	GM1048E	GM1060E	GM1072E
Mower deck gearbox (hp <sup>4</sup> /kw)	30/22.37	30/22.37	30/22.37
Hitch	Category 1	Category 1	Category 1
iMatch™ <sup>2</sup> compatibility	Conversion kit available†	Conversion kit available†	Conversion kit available†
Cutting width (in./cm)	48/121.9	60/152.4	72/182.9
Cutting height range (in./cm)	1 to 4/ 2.5 to 10.2	1 to 4/ 2.5 to 10.2	1 to 4/ 2.5 to 10.2
Caster wheels (in./cm)	(4) 8.4 x 3.2 in. 21.3 x 8.1 solid	(4) 8.4 x 3.2 in. 21.3 x 8.1 solid	(4) 8.4 x 3.2 in. 21.3 x 8.1 solid
Blade speed (fpm/mps)	13,188/67	14,763/75	14,566/74
Approximate operating weight (lb./kg)	340/154.22	375/170.1	440/200
Overall width (in./cm)	51/129.5	62/157.5	74/188

<sup>2</sup>The iMatch Quick-Hitch does not work with all tractor series or with all implements. See your John Deere dealer to determine which tractors and implements are compatible with the iMatch.



## Rear-Discharge Grooming Mowers

Model Number	GM2060R	GM2072R	GM2084R	GM2190R	GM2109R
Tractor horsepower <sup>4</sup> (hp/kw)	20 to 50/14.91 to 37.28	20 to 50/14.91 to 37.28	25 to 50/18.64 to 37.28	30 to 70/22.37 to 52.2	30 to 70/22.37 to 52.2
Tractor PTO speed	540 rpm	540 rpm	540 rpm	540 rpm	540 rpm
Mower deck gearbox (hp <sup>4</sup> /kw)	50/37.28	50/37.28	50/37.28	70/52.2	70/52.2
Gearbox ratio	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:2.08	1:2.08
Hitch	Category 1	Category 1	Category 1	Category 1	Category 1
iMatch™ <sup>2</sup> compatibility	Conversion kit available†	Conversion kit available†	Conversion kit available†	Conversion kit available†	Conversion kit available†
Driveline	1.38 in. ASAE Cat. 3	1.38 in. ASAE Cat. 3	1.38 in. ASAE Cat. 3	1.38 in. ASAE Cat. 4	1.38 in. ASAE Cat. 4
Drive type	Gearbox over V-Belt (2)	Gearbox over V-Belt (2)	Gearbox over V-Belt (2)	Gearbox over V-Belt (2)	Gearbox over V-Belt (2)
Deck thickness	8-ga. steel plate	8-ga. steel plate	8-ga. steel plate	8-ga. steel plate	8-ga. steel plate
Cutting width (in./cm)	60/152.4	72/182.9	84/213.4	90/228.6	110/279.4
Cutting height range (in./cm)	1 to 5/2.5 to 12.7	1 to 5/2.54 to 12.7	1 to 5/2.5 to 12.7	1.3 to 5.3/3.3 to 13.5	1.3 to 5.3/3.3 to 13.5
Cutting height adjustment	Spacer on caster	Spacer on caster	Spacer on caster	Spacer on caster	Spacer on caster
Caster wheels (in./cm)	(4) 10 x 3.2/25.4 x 8.1 solid or 11 x 4 in/27.9 x 10.2 (4 ply) pneumatic	(4) 10 x 3.2/25.4 x 8.1 solid or 11 x 4 in/27.94x 10.2 (4 ply) pneumatic	(4) 10 x 3.2/25.4 x 8.1 solid or 11 x 4 in/27.9 x 10.2 (4 ply) pneumatic	(4) 12 x 4/30.5 x 10.2 solid or 13 x 6.5/33 x 16.5 (4 ply) pneumatic	(4) 12 x 4/30.5 x 10.2 solid or 13 x 6.5/33 x 16.1 (4 ply) pneumatic
Caster wheel bearings	Shielded roller bearings	Shielded roller bearings	Shielded roller bearings	Shielded roller bearings	Shielded roller bearings
Blade speed (fpm/mps)	16,929/86	16,732/85	16,338/83	14,106/71.66	14,998/76
Blade spindles	3 cast iron	3 cast iron	3 cast iron	3 cast iron	3 cast iron
Blade spindle bearings	Shielded ball bearings (2) per spindle	Shielded ball bearings (2) per spindle	Shielded ball bearings (2) per spindle	Shielded tapered bearings (2) per spindle	Shielded tapered bearings (2) per spindle
Blade composition	Heat-treated alloy steel	Heat-treated alloy steel	Heat-treated alloy steel	Heat-treated alloy steel	Heat-treated alloy steel
Blade overlap (in./cm)	1.13/2.9	1.13/2.9	1.13/2.9	1.38/3.5	1.38/3.5
Blade dimensions (in./cm)	(3) 20.2 x 2.36 x .25/ 51.3 x 6 x .6	(3) 24.53 x 2.36 x .25/ 62.3 x 6 x .6	(3) 28.58 x 2.36 x .25/ 72.6 x 6 x .6	(6) 13 x 2.75 x .25/ 33 x 7 x .6	(6) 15.94 x 2.75 x .25/ 40.5 x 7 x .6
Belts	5VX, polyester/cogged	5VX, polyester/cogged	5VX, polyester/cogged	CX, polyester/cogged	CX, polyester/cogged
Belt adjustment	Single point, slottedtrack adjustment – no idlers	Single point, slottedtrack adjustment – no idlers	Single point, slottedtrack adjustment – no idlers	Single point, slottedtrack adjustment – no idlers	Single point, slottedtrack adjustment – no idlers
Mulching kit <sup>3</sup>	Optional	Optional	Optional	N/A	N/A
Approximate operating weight (lb./kg)	550/249.48	600/272.16	690/312.98	1,137/515.73	1,290/585.13
Front roller kit <sup>3</sup>	Optional	Optional	Standard	Standard	Standard

<sup>3</sup>Available at additional cost. <sup>4</sup>The engine horsepower and torque information are provided by the engine manufacturer to be used for comparison purposes only. Actual operating horsepower and torque will be less. Refer to the manufacturer's web site for additional information. Manufacturer's power output is within + or - 5% at standard SAE J 1995 and ISO3046.

# Flex-Wing, Rear-Discharge Grooming Mowers

Model Number	FM2012R	FM2015R	FM2017R	FM2112R	FM2115R	FM2117R	FM2120R
Tractor horsepower <sup>4</sup> (hp/kw)	25 to 80/18.64 to 59.66	30 to 80/22.37 to 59.66	35 to 80/26.1 to 59.66	35 to 80/26.1 to 59.66	35 to 80/26.1 to 59.66	35 to 80/26.1 to 59.66	35 to 80/26.1 to 59.66
Tractor PTO speed	540 rpm	540 rpm	540 rpm	540 rpm	540 rpm	540 rpm	540 rpm
Splitter gearbox (hp <sup>4</sup> /kw)	80/59.66	80/59.66	80/59.66	80/59.66	80/59.66	80/59.66	80/59.66
Mower deck gearbox (hp <sup>4</sup> /kw)	50 (37.3)	50 (37.3)	50 (37.3)	50 (37.3)	50 (37.3)	50 (37.3)	50 (37.3)
Gearbox ratio	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:3.09 (spiral gears)	1:3.09 (spiral gears)
Hitch	Category 1 or 2, drawbar	Category 1 or 2, drawbar	Category 1 or 2, drawbar	Category 1 or 2, drawbar	Category 1 or 2, drawbar	Category 1 or 2, drawbar	Category 1 or 2, drawbar
Hitch adjustment	4 position	4 position	4 position	4 position	4 position	4 position	4 position
Driveline	1.38 in. ASAE Cat. 6	1.38 in. ASAE Cat. 6	1.38 in. ASAE Cat. 6	1.38 in. ASAE Cat. 6	1.38 in. ASAE Cat. 6	1.38 in. ASAE Cat. 6	1.38 in. ASAE Cat. 6
Drive type	Gearbox over, V-belts (2)	Gearbox over, V-belts (2)	Gearbox over, V-belts (2)	Gearbox over, V-belts (2)	Gearbox over, V-belts (2)	Gearbox over, V-belts (2)	Gearbox over, V-belts (2)
Deck thickness	8-gauge steel plate	8-gauge steel plate	8-gauge steel plate	8-gauge steel plate	8-gauge steel plate	8-gauge steel plate	8-gauge steel plate
Deck overlap (in./cm)	6/15.24 (adj. to 9 in/22.9)	6/15.24 (adj. to 9 in/22.9)	6/15.24 (adj. to 9 in/22.9)	6/15.24 (adj. to 9 in/22.9)	6/15.24 (adj. to 9 in/22.9)	6/15.24 (adj. to 9 in/22.9)	6/15.24 (adj. to 9 in/22.9)
Deck lift cylinders (in./cm)	2.5 x 10/6.4 x 25.4 single acting	2.5 x 10/6.4 x 25.4 single acting	2.5 x 10/6.4 x 25.4 single acting	2.5 x 10/6.4 x 25.4 single acting	2.5 x 10/6.4 x 25.4 single acting	2.5 x 10/6.4 x 25.4 single acting	2.5 x 10/6.4 x 25.4 single acting
Cutting width (ft./m)	12/3.66	15/4.57	17/5.18	12/3.66	15/4.57	17/5.18	20/6.1
Cutting height range (in./cm)	1 to 5/2.5 to 12.7	1 to 5/2.5 to 12.7	1 to 5/2.5 to 12.7	1 to 5/2.5 to 12.7	1 to 5/2.5 to 12.7	1 to 5/2.5 to 12.7	1 to 5/2.5 to 12.7
Cutting height adj.	Spacer on caster	Spacer on caster	Spacer on caster	Spacer on caster	Spacer on caster	Spacer on caster	Spacer on caster
Caster wheels (in./cm)	(12) 11 x 4/27.9 x 10.2 pneumatic	(12) 11 x 4/27.9 x 10.2 pneumatic	(12) 11 x 4/27.9 x 10.2 pneumatic	(12) 13 x 6.5/33 x 16.5 pneumatic	(12) 13 x 6.5/33 x 16.5 pneumatic	(12) 13 x 6.5/33 x 16.5 pneumatic	(12) 13 x 6.5/33 x 16.5 pneumatic
Caster wheel bearings	Sealed roller bearings	Sealed roller bearings	Sealed roller bearings	Sealed roller bearings	Sealed roller bearings	Sealed roller bearings	Sealed roller bearings
Blade speed (fpm/mps)	15,747/80	16,863/85.66	16,732/85	15,747/80	16,863/85.66	16,732/85	16,338/83
Blade spindles	(9) cast iron	(9) cast iron	(9) cast iron	(9) cast iron	(9) cast iron	(9) cast iron	(9) cast iron
Blade spindle bearings	Shielded ball bearings (2 per spindle)	Shielded ball bearings (2 per spindle)	Shielded ball bearings (2 per spindle)	Shielded ball bearings (2 per spindle)	Shielded ball bearings (2 per spindle)	Shielded ball bearings (2 per spindle)	Shielded ball bearings (2 per spindle)
Blade composition	Heat-treated, alloy steel	Heat-treated, alloy steel	Heat-treated, alloy steel	Heat-treated, alloy steel	Heat-treated, alloy steel	Heat-treated, alloy steel	Heat-treated, alloy steel
Blade overlap (in./cm)	1.13/2.87	1.13/2.87	1.13/2.87	1.13/2.87	1.13/2.87	1.13/2.87	1.13/2.87
Blade dimensions (in./cm)	(6) 16.61 x 2.36 x .25/42.2 x 6 x .6 (3) 20.2 x 2.36 x .25/51.3 x 6 x .6	(6) 20.2 x 2.36 x .25/51.3 x 6 x .6 (3) 24.53 x 2.36 x .25/62.3 x 6 x .6	(9) 24.53 x 2.36 x .25/62.3 x 6 x .6	(6) 16.61 x 2.36 x .25/42.2 x 6 x .6 (3) 20.2 x 2.36 x .25/51.3 x 6 x .6	(6) 20.2 x 2.36 x .25/51.3 x 6 x .6 (3) 24.53 x 2.36 x .25/62.3 x 6 x .6	(9) 24.53 x 2.36 x .25/62.3 x 6 x .6	(9) 28.58 x 2.36 x .25/ 72.6 x 6 x .6
Belts	5VX, polyester/cogged	5VX, polyester/cogged	5VX, polyester/cogged	5VX, polyester/cogged	5VX, polyester/cogged	5VX, polyester/cogged	5VX, polyester/cogged
Belt adjustment	Single-point, slotted track adjustment, no idlers	Single-point, slotted track adjustment, no idlers	Single-point, slotted track adjustment, no idlers	Single-point, slotted track adjustment, no idlers	Single-point, slotted track adjustment, no idlers	Single-point, slotted track adjustment, no idlers	Single-point, slotted track adjustment, no idlers
Approx. operating wt. (lb./kg)	2,694/1,222	2,826/1,282	2,947/1,337	3,090/1,402	3,267/1,482	3,438/1,559.45	3,747/1,699.61
Transport width (ft./m)	7.7/2.31	8.1/2.46	8.3/2.54	7.7/2.31	8.1/2.46	8.4/2.54	8.8/2.67
Transport tires (in./cm)	(2) 20.5 x 8 x 10/52.1 x 20.3 x 25.4	(2) 20.5 x 8 x 10/52.1 x 20.3 x 25.4	(2) 20.5 x 8 x 10/52.1 x 20.3 x 25.4	(2) 23x10.5x12/58.4 x 26.7 x 30.5	(2) 23x10.5x12/58.4 x 26.7 x 30.5	(2) 23x10.5x12/58.4 x 26.7 x 30.5	(2) 23x10.5x12/58.4 x 26.7 x 30.5
Transport length (ft./m)	11.9/3.61	12.2/3.71	12.2/3.71	11.1/3.4	12.2/3.71	12.4/3.76	15/4.57
Transport height (ft./m)	6.2/1.88	7.7/2.34	8.7/2.62	6.2/1.88	7.7/2.34	8.7/2.62	9.7/2.95
Overall width (ft./m)	12.2/3.71	15.2/4.62	17.2/5.23	12.2/3.71	15.2/4.62	17.2/5.23	20.2/6.1
Maximum overall length (ft./m)	12.7/3.86	13/3.96	13/3.96	13.1/4	14.6/4.45	15.5/4.7	16.3/4.95
Operating tongue wt. (lb./kg)	374/169.64	381/72.82	389/176.45	456/206.84	466/211.37	477/216.36	489/221.81
Transport tongue wt. (lb./kg)	774/351.1	807/366.1	953/432.27	945/428.64	986/447.24	1,170/530.7	1,220/553.38
Mainframe construction (in./cm)	3.5/8.9 tubing	3.5/8.9 tubing	3.5/8.9 tubing	4/10.2 tubing	4/10.2 tubing	4/10.2 tubing	4/10.2 tubing
Ground pressure (psi/kPa)	9.1/62.74	9.6/66.19	10/68.95	6.5/44.82	7.2/49.64	8/55.16	8.7/59.98
Ctr. deck cutting width (ft./m)	5/1.52	6/1.83	6/1.83	5/1.52	6/1.83	6/1.83	7/2.13
Wing deck cutting width (ft./m)	4/1.22	5/1.52	6/1.83	4/1.22	5/1.52	6/1.83	7/2.13



## Tough mowers with a fine finish, sized right for your property



### Economy-Duty Grooming Mowers

GM1048E, GM1060E, GM1072E

Cut your grass and grow your budget, with a cost-effective rear-discharge, Economy-Duty Grooming Mower. Select a 48-, 60- or 72-inch (1.2, 1.5, or 1.8 m) cutting-width mower to work with a 16 to 30 horsepower<sup>4</sup> tractor.

Two tubular-steel arms strengthen the deck and support the wheels to maintain a consistent cutting height. The steel-reinforced deck, simple mowing height adjustment, and floating three-point Category 1 linkage are standard. These mowers also have a high blade-tip speed and precise overlap for strength, performance, and a high-quality cut.



A rugged gearbox with cooling fins provides durability and reliability.



Frontier economy-duty grooming mowers can be fitted with the John Deere iMatch quick-hitch system. iMatch converts your tractor's 3-point hitch to fixed hooks and attaching points for a super-quick connection. (iMatch<sup>2</sup> hitch and implement A-frame kit sold separately.<sup>3</sup>)



Four swiveling wheels follow ground contours for stability and to prevent scalping.

Note: models/items may not be exactly as shown. See disclaimer below.

<sup>2</sup> The iMatch Quick-Hitch does not work with all tractor series or with all implements. See your John Deere dealer to determine which tractors and implements are compatible with the iMatch.

This literature has been compiled for worldwide circulation. While general information, pictures and descriptions are provided, some illustrations and text may include finance, credit, insurance, product options and accessories NOT AVAILABLE in all countries or regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries. PLEASE CONTACT YOUR LOCAL JOHN DEERE DEALER FOR DETAILS. John Deere reserves the right to change specifications, design and price of products described in this literature without notice. John Deere, the leaping deer symbol and John Deere's green and yellow trade dress are the trademark of Deere & Company. Copyright 2013, Frontier Equipment.

