



PALADIN
POWERFUL ATTACHMENT TOOLS

POWER RAKES



FFC



HARLEY



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POWERFUL ATTACHMENT TOOLS

FFC and Harley Power Rakes, by Paladin, are the perfect choice for preparing seedbeds, cutting grades, grading dirt or gravel roads, and cleaning up and finish grading residential or commercial sites.

When preparing a seed bed there are many challenges your equipment must conquer! It must be able to work in either dry or wet conditions. It needs to create a dimpled seedbed that promotes moisture, soil and seed retention. Old lawns, weeds, pebbles, rocks, and other debris larger than 3/4" in size need to be removed. It should have the ability to grade, shape and blend the new seedbed into existing site topography.

Paladin provides the highest quality, most durable and versatile power rakes available. Widely regarded as the "gold standard" for soil preparation attachments, they are designed to create the most optimal seedbed conditions. Our rakes allow the operator to make precise adjustments to the rake allowing a match to existing grades and a seamless blend into adjacent established landscaping.





Power Rakes by Harley and FFC

- Mount to compact tool carriers, skid steer loaders and tractors. There is also a self-propelled, walk behind version.
- Hydraulically powered direct, chain, and PTO drives are available depending on the prime mover and your preference.
- Working widths range from 36" to 90"



POWER RAKES



**FFC and Harley
Power Rakes
prepare seedbeds,
cut grades,
grade dirt and
gravel roads.**



FEATURES



Motor and Drive Train

- The hydraulic motors are bi-directional and always located away or shielded from dirt and hazards
- High quality and durable motors provide high torque and superior performance



Chain Drives

- Low profile chain case on the Harley Power Rake allows for maximum teeth and roller depth
- The enclosed chain drive with center chain idler has been **proven to prolong drive chain life by eliminating chain slap and compensating for chain stretch** - a 00 liquid grease is used for lubrication
- Also absorbs drum roller impact forces thereby protecting the hydraulic motor
- If necessary, chain replacement usually takes less than 60 minutes



Wheels

- Dual independently adjustable gauge wheels provide the versatility to accomplish several jobs with one machine, increasing productivity
- Allows for skim passes before over seeding
- Can adjust to cut drainage grades
- Wheels fold up and away for easy storage and transport on the Harley M4, D4 and FFC models



Box Ends

- Dual position box-end plates allow for windrowing and directing material while operating the prime mover in forward and reverse
- They can be flared out for working along foundations or sidewalks
- Box-ends help contain and direct raked debris like rocks, roots, etc.
- No tools required



- Manual and hydraulic angles

FEATURES



Adjustable Barrier

- An adjustable 6" polypropylene barrier allows you to quickly choose the size of material you want to leave on the seedbed. The barrier is stiff enough for pushing yet flexible enough to let damaging debris to pass
- Allows for versatility in how material is processed/dispensed
- Lets the operator open up muddy/soggy jobsites quickly



Tooth Patterns

- The optimized and *patented* tooth patterns have been designed to create the perfect seedbed for promoting optimal germination and growth conditions
- Maximizes seeding ability with fewer passes, increasing productivity
- The pure carbide proprietary teeth provide long operating life
- The special blunt shape creates the best seedbed sub-base that promotes a fracture pattern and superior moisture retention/release capabilities
- Allows efficient windrowing when angled left or right
- Constant down pressure creates a clean seedbed every time



Hydraulically Powered Chain Reduction and PTO Drives



Hydraulically Powered Dual Direct-Drive Motors



DIRECT DRIVE MODEL D4

For Compact Tool Carriers (Dingo, Ditch Witch, Boxer, Vermeer)

- 8-15 GPM direct drive motor
- 48" width (45.2" raking width at full angle)
- Manual and hydraulic angle (20°)
- Flip up wheel arms for easy storage and transport



- Direct drive motor is embedded within frame and drum providing optimal protection from dirt and debris.
- Bi-directional motor allows the drum to rotate in either direction maximizing flexibility.
- Adjustable polypropylene barrier above the roller allows you to quickly react to soil moisture conditions. You can choose the size of the

material you want to leave in the seedbed. Raising the barrier promotes faster soil drying and opening up of muddy sites.

- Proprietary tooth pattern design. Specially shaped and placed carbide teeth ensure the best possible seedbed sub-base fracture pattern and superior moisture retention and release.
- Easily removable box-end plates for windrowing and reverse box raking...no bolts, just pull the pins.
- Dual independently adjustable gauge wheels allow skim passes for over-seeding - or - adjust to cut drainage grades. Simple height adjustment utilizes bail pins for improved reliability.
- New bearing design simplifies drum change-outs.
- Multi-position box ends.

Specifications	D4M	D4H
Weight (lbs)	365	383
Roller Width	48"	48"
Length (overall)	49.2"	49.2"
Width (overall)	55.4"	55.4"
Raking Width (full angle)	45.2"	45.2"
Angle Roll	20°	20°
Required Flow (GPM)	8-15	8-15

POWER RAKE MODEL M4

For Skid Steers with rated operating capacity less than 1,500 lbs.

- Heavier frame than D4
- Minimum 8 GPM
- Chain reduction drive
- 48" width
- Manual and hydraulic angle (20°)



- Adjustable barrier above the roller allows you to quickly react to soil moisture conditions.
- Bi-directional motor allows the drum to rotate in either direction maximizing flexibility.
- Pure carbide proprietary teeth design - specially shaped to ensure the best possible seedbed sub-base fracture pattern and superior moisture retention and release.
- Quick and easy removable box-end plates for windrowing and reverse box raking...no bolts, just pull the pins.
- Dual independently adjustable gauge wheels allow for skim passes for over-seeding - or - adjust to cut drainage grades.
- Harley comes with a standard toggle hydraulic control box.

Specifications	M4F	M4M	M4H
Weight (lbs)	408	435	450
Roller Width	48"	48"	48"
Length (overall)	51"	51"	51"
Width (overall)	58"	58"	58"
Raking Width (full angle)	48"	45"	45"
Angle Roll	NA	20°	20°
Min. GPM	8	8	8

POWER RAKE MODELS M5, M6, MX7, MX8

For Skid Steers with rated operating capacity greater than 1,500 lbs.

- Minimum 15-17 GPM
- Chain reduction drive
- Range depends on model
- 60", 72", 84", 90" widths (58" - 85" raking width at full angle depending on model)
- Manual and hydraulic angle (20°)
- MX models feature heavier main frame

M Series

- Adjustable 6" polypropylene barrier allows you to quickly choose the size of material you want to leave on the seedbed. The barrier is stiff enough for pushing yet flexible enough to let damaging debris to pass.
 - Bi-directional motor allows the drum to rotate in either direction maximizing flexibility.
 - Pure carbide proprietary teeth design - specially shaped to ensure the best possible seedbed sub-base fracture pattern and superior moisture retention and release.
 - Quick and easy removable box-end plates for windrowing and reverse box raking...no bolts, just pull the pins.
 - Dual independently adjustable gauge wheels allow for skim passes for over-seeding - or - adjust to cut drainage grades.



- Harley comes with a standard toggle hydraulic control box. Can be ordered with an in-cab attachment controller harness.

MX Series

(In addition to all the features of the M Series)

- Triple-sealed and shielded bearings for extra protection and long life.
- Dual independently adjustable gauge wheels allow for skim passes for over seeding - or - adjust to cut drainage grades.
- Slim profile frame bearing ends allow full-depth, first-pass teeth penetration.
- Quick and easy removable box-end plates allow windrowing and reverse box raking - no bolts, just pull the pins.

Specifications	M5F	M5M	M5H	M6F	M6M	M6H
Weight (lbs)	798	936	944	838	998	1004
Roller Width	62"	62"	62"	72"	72"	72"
Length (overall)	59"	59"	59"	64"	64"	64"
Width (overall)	72"	72"	72"	81"	81"	81"
Raking Width (full angle)	NA	58"	58"	NA	68"	68"
Angle Roll	NA	20°	20°	20°	20°	20°
Min. GPM	13	13	13	13	13	13

Specifications	Mx7M	Mx7H	Mx8M	Mx8H
Weight (lbs)	1035	1059	1308	1332
Roller Width	64"	64"	76"	76"
Length (overall)	93"	93"	100"	100"
Width (overall)	84"	84"	90"	90"
Raking Width (full angle)	79"	79"	85"	85"
Angle Roll R or L	20°	20°	20°	20°
Min. GPM	15	15	17	17

POWER RAKE MODELS TM4, TM5, T6, TM7, TM8

For 3-Point Tractors (Cat I TM4, TM5, T6; Cat I and II for TM7, TM8)



- Range of 12-80 hp with PTO drive - range depends on model
- 48", 60", 72", 84", 90" widths (46" - 81" raking width at full angle depending on model)
- Manual and hydraulic angle (15°)
- Grease-able, triple-sealed and shielded bearings for extra protection and long life.
- Harley's well designed frame geometry offers excellent visibility of your work surface.
- Dual independently adjustable gauge wheels allow for skim passes for over seeding - or - adjust to cut drainage grades.
- Angling capability powered by the tractor hydraulics, allowing the operator to angle right or left for directing material.

Specifications	TM4	TM5	T6	TM7	TM8
Weight (lbs)	537	564	871	1323	1380
Length (overall)	49"	49"	48"	56"	56"
Width (overall)	57"	71"	81"	93"	99"
Raking Width	48"	60"	72"	84"	90"
Raking Width (full angle)	46"	58"	69"	81"	87"
Roll-Back Barrier Range	1/8" - 2"	1/8" - 2"	5/16" - 2 15/16"	11/8" - 3 3/8"	11/8" - 3 3/8"
Angle Roll	15°	15°	15°	15°	15°
Engine HP Range	15-22	18-32	30-40	42-80	42-80
3-Point Attachment	Limit Cat. 1	Limit Cat. 1	Cat. 1	Cat. 1, 2	Cat. 1, 2

Harley PTO Rake Features

Unique **Tractor Mount Compensation Slot** for attachment of the three point arm, fixed or floating, depending upon job site requirements



Angling capability powered by the tractor hydraulics



Float function location

SAE location

Three-point Quick Hitch location (John Deere, International Harvester and foreign manufacturers)

Harley PTO Rake Features continued next page

POWER RAKE MODELS TM4, TM5, T6, TM7, TM8

PTO Rake Features

Adjustable Roll Back Barrier



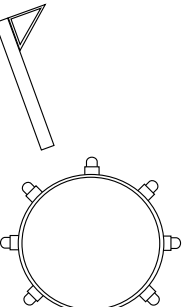
The Roll Back Barrier's Aperture Control gives the operator 5 separate control options over how the material is handled by the roller and teeth.



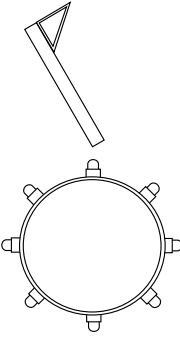
Each position change allows the effective surface of the roller to grow. Each position has a different effect on the material being prepared.

Aperture: the space between the top of the roller and the barrier edge

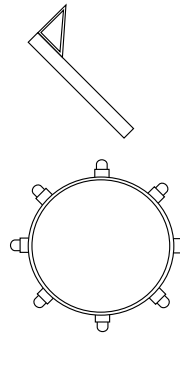
Position 1 Optimal for moving or carrying soils or material. Keeps material moving versus bulding into a large packed pile unable to "breathe and dry".



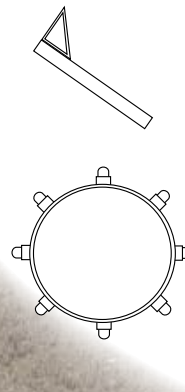
Position 2 The barrier's edge is now directly over the centerline of the roller. Contact area for the roller and teeth is made larger allowing for an increased "grinding" effect on the material.



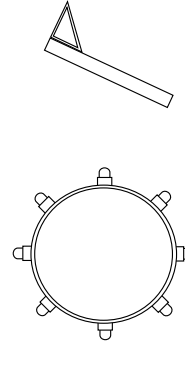
Position 3 The aperture is now larger and the contact area for the roller and teeth is increased even more allowing for more aggressive handling of clumps of material. Reduced particle sizes will slip over the roller.



Position 4 More material is allowed to pass over the roller. Less horsepower is required to pull the rake. Travel speed and productivity are increased. This position is best used where soils have less rock and debris and are less hard and chunky.



Position 5 This position is optimal for opening-up and drying muddy conditions allowing sod to process over the roller, aiding drying of its root mass. This is also great for reconditioning stone roads and parking lots. This is the best position for soil conditioning.



POWER RAKE WALK BEHIND

- Power unit and 36" Harley Rake
- 13 hp Honda engine
- Speed: 4 mph forward, 2.5 mph in reverse
- Optional 48" hydraulic sweeper attachment for power unit
- Bi-directional motor allows the drum to rotate in either direction maximizing flexibility



POWER RAKE DIRECT DRIVE

For Skid Steers with rated operating load less than 5,000 lbs.

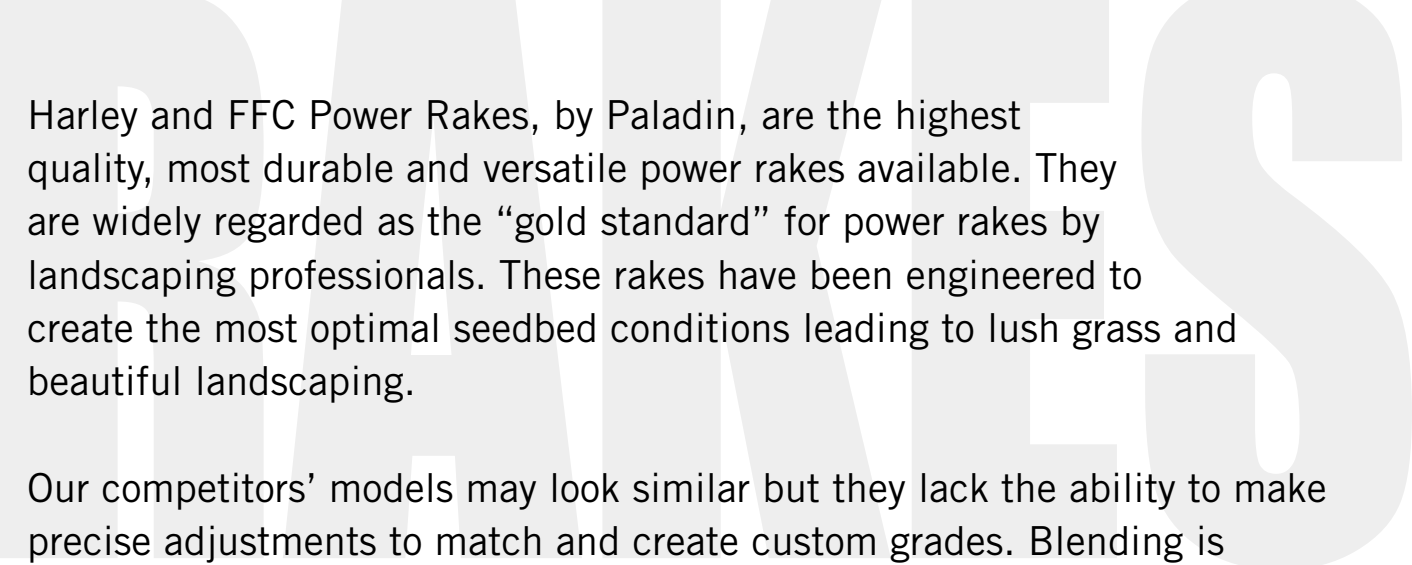
- Minimum 12 GPM required
- Dual direct drive motors
- 72" and 90" widths
- Manual and hydraulic angle (20°)
- Flip up wheel arms for easy storage and transport



- Bi-directional motors allow the drum to rotate in either direction maximizing flexibility.
- Available with manual or hydraulic angling to angle 20 degree in either direction; also available as a rigid-mount, with 4-bar floating linkage, or with 3-point hitch (hydraulic drive).
- Dual direct-drive motors efficiently transfer power to the roller, heavy-duty frame extends life.
- Designed to work on skid-steers, backhoe-loaders, small wheel loaders and utility loaders.

Specifications	Manual Angle		Hydraulic Angle	
	LAF5672	LAF5690	LAF5673	LAF5691
Working Width	72"	90"	72"	90"
Overall Width	83"	101"	83"	101"
Overall Height	30.3"	30.3"	27.6"	27.6"
GPM Range	12 to 40	12 to 40	12 to 40	12 to 40
PSI Range	2000-3500	2000-3500	2000-3500	2000-3500
Drum Torque @2500 PSI	605 ft-lb	605 ft-lb	605 ft-lb	605 ft-lb
Weight	1071 lbs	1153 lbs	1096 lbs	1179 lbs

Hydraulic Angle Kit Boxed Separately	
Order Code	LAF5650
Weight	35 lbs



Harley and FFC Power Rakes, by Paladin, are the highest quality, most durable and versatile power rakes available. They are widely regarded as the “gold standard” for power rakes by landscaping professionals. These rakes have been engineered to create the most optimal seedbed conditions leading to lush grass and beautiful landscaping.

Our competitors’ models may look similar but they lack the ability to make precise adjustments to match and create custom grades. Blending is seamless.

Don't settle for less...

Set your standard with our

gold standard for

Power Rakes





The Power of Combined Excellence®

BRADCO CP CUSTOMWORKS FFC HARLEY J:B McMILLEN SWEEPSTER

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