REARS

600-series Pak-Flail Mower

b series

1

REARS RAISES THE STANDARD, AGAIN. THE NEXT GENERATION PAK-FLAIL.

Rears *600-series* **Pak-Flail Mower** utilizes a high performance industrial alloy to shed pounds and add strength. *AR400* is a high-strength, wear resistant steel: the *600-series* housing requires a separate production system- our metal shop nearly sprung our plate rollers when forming the prototype. Rears ³/16" *600-series* housing has the strength of a ⁹/16" steel plate housing- with only a fraction of the weight.

Performance comparisons with A36 steel, commonly used for flail housings, show a **4x** yield strength increase: **4x** the dent protection, **4x** the rock protection. Hardness comparisons (a good measure of wear resistance): A36 measures 150 Brinell, AR400 measures 400 Brinell. AR400, when used to build quarry loader buckets, increased bucket work life three-fold over high strength *T-1* steel.

From tractor to mower, the smooth transfer of energy makes the flail a natural extension of your tractor. *Timken* tapered roller bearings in the top bearing block absorb drive-line thrust and radial load. ASAE cat.6 u-joints provide lifetime dependability.

Each rotor in every flail machine is dynamically balanced with blades prior to installation. Rotors can be dual-balanced for different blade sets. The diameter of the rotor mandrel is determined by the swath width: wider swaths require larger

diameter rotors to insure mandrel rigidity and smooth operation. Rotor diameter determines flail housing height: see the chart of specifications, *over*.

2

The skeletal rigidity of the formed *AR400* housing greatly simplifies the *600-series* support structure (and sheds pounds)- the mast components and housing are integrated for a stable, smooth ride. The mower center of gravity is close to the tractor, to reduce the over-hanging stresses on tractor lift-arms. All weld seams are to seal and strengthen the structure. All 600-series Pak-Flail Mowers are available with FL920 hardened grassblades or *FL960* shredding knives **(5)**. FL940 and FL946 crop chop knives are available 00 for units with 10'-12' swath width. Rotors can be dual-balanced for different blade sets.



FL920

Hardened for long edge life, each blade is easily replaceable without a wrench or socket: simply turn the D-ring and slip off the blade.



FL960

For mowing and light material shredding. Blades are reversible for long edge life.

choppers, the crop-chop knife is rolled to shape from C1050 alloy steel and heat treated for long edge life. Both the FL940 and 946 are reversible- the FL946 is

FL940 & FL946

Standard on our field

a hard surfaced knife.

Open discharge **6** to reduce horsepower consumption.

Rears **quick-draw** tensioning system is impressively simple: by

spreading the distance between jackshaft and rotor shaft, it pulls belts to proper tension. Rears' system has *no backside idler*, removing the associated maintenance costs and the belt

killing heat of common belt deflection tension systems. For durability, reliability, jackshaft protection and long belt life, Rears jackshaft tensioner outperforms the competition.

Our self aligning double spherical roller bearing (8) is a topgrade performer: for heavy loads and impact deflection- this rotor bearing is tireless and dependable. To isolate the bearing from the environment inside the flail, the engineers at Rears developed a grease labyrinth barrier, integrated with the rotor mandrel, for maximum protection. This design eliminates the hazard of overgreasing- all vented lubricant feeds the renewable labyrinth; the grease labyrinth works to keep the bearing cool in operation; and the integrated labyrinth design makes a wicked anti-wrap.

C Rears triple sealed roller bearing **9** with antiwrap bearing protection. The pilot ring on the bearing housing mounts into a machined slot

in the roller pivot plate- this piloted steel joint, not the bearing mount bolts, shoulders the weight of the flail.

Flail height is adjusted by simply rotating the pivot plate. Flail swaths 13' and greater have a 8-5/8" dia. roller, standard. Also available for narrower models.

	Cut width	10'-15' swath	
	Overall width	12" over cut width	
	3-point	Category II -center mount or fixed offset	
	PTO speed	540 RPM or 1000 RPM	
	Power required	5-6HP/ft: determined by speed, terrain, biomass, and machine width	
		10'-12' swath	13'-15' swath
	Rotor mandrel	1-15/16" shaft 8-5/8"dia. mandrel	1-15/16" shaft 10-3/4"d. mandrel
1 (B)	Knife tip speed	10200 FPM	98 30 FPM
	Mandrel speed	1730 RPM	1520 RPM
	Weight, std. unit	10 2200lbs 11 2300lbs 12 2400lbs	13 2750lbs 14 2950lbs 15 3150lbs
2	Blades	FL920, FL960 FL940, FL946	FL920, FL960
-	Gauge roller	1-3/4" shaft, 6-5/8" dia. roller	1-3/4" shaft, 8-5/8" dia. roller
	Cut height	0 - 4"	0 - 5"
	Belt housing height	upright 37-1/4" lo-pro 28-1/4"	lo-pro 29-5/16"
	Flail housing height	25-1/2"	27-15/16"

For dealer or product information,

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