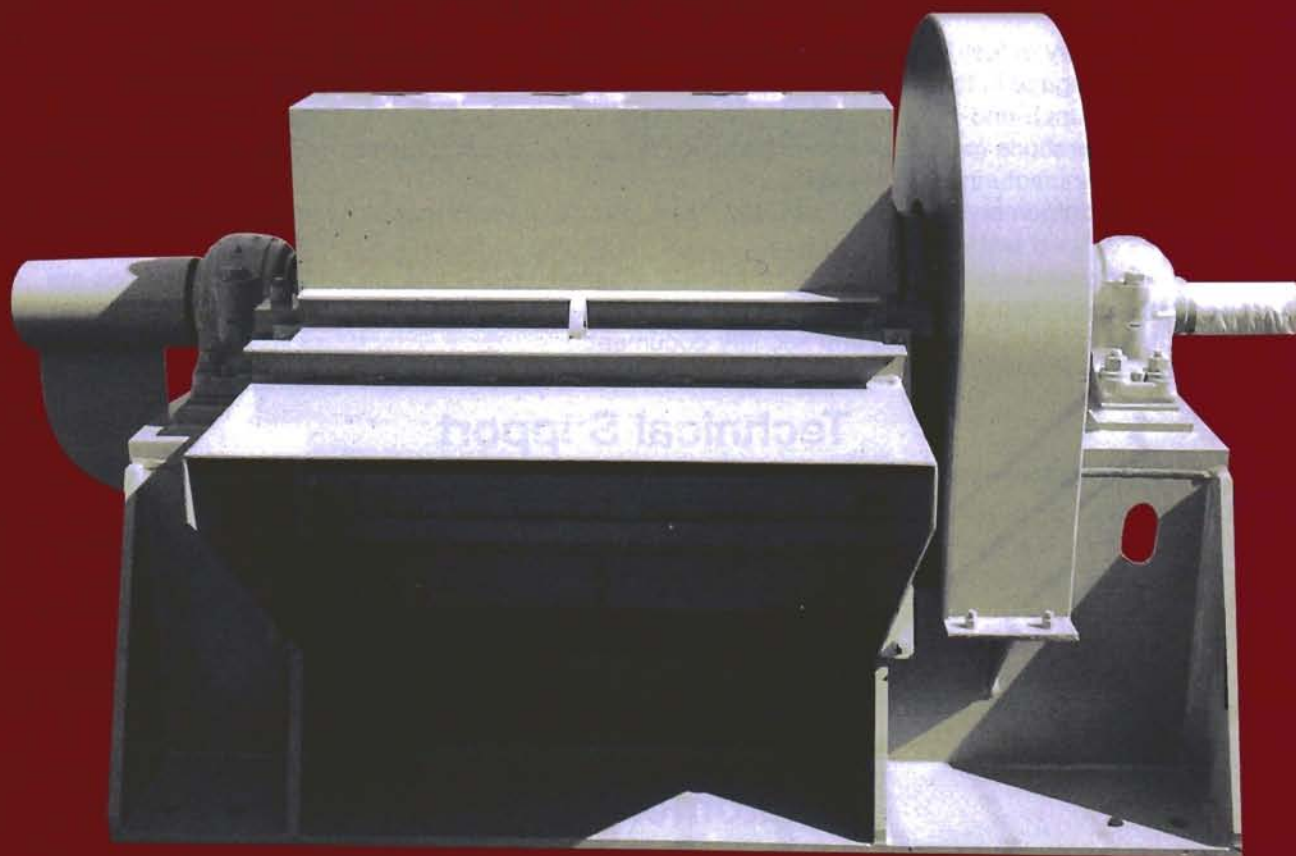


**MONTGOMERY**  
**HORIZONTAL FEED HOG®**  
HD and PM Models



**MONTGOMERY INDUSTRIES INTERNATIONAL, INC.**

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*Since 1925 — Solving Difficult Problems for Industry*

# END SOLID WASTE DISPOSAL PROBLEMS

- Edgings
- Molder Trim
- Rippings



- Scrap & Trim from Plywood & Particleboard Plants
- Sheeted Corrugated Scrap
- Slabs over eight feet in length

## About the Company

Montgomery Industries International was established in 1925, as Jacksonville Blow Pipe Company, to engage in the manufacture of pneumatic material conveying systems. In 1946, the Montgomery Punch-and-Die Hog was developed to pulverize waste materials associated with wood processing operations for use as animal bedding, boiler fuel, and horticultural mulch or recycled as raw material for manufacturing particleboard.

Today Montgomery Industries manufactures a complete line of machines to pulverize or grind most types of solid waste.

Besides wood related scrap such as cut-offs, edgings, veneer and slabs, Montgomery Hogs are pulverizing or grinding asphalt cake, bark, cardboard tubes, magazines, newspapers, pallets, polyurethane scrap, rubber tires, and security documents.

Montgomery Hogs are operating in the United States and 35 foreign countries.

## Technical Support

Montgomery Industries has prepared videos on many of the most common applications to supplement our product catalog and brochures.

In addition, Montgomery Industries will test grind a sample of a prospective customer's material and return their end product for inspection.

Our regional sales managers and well trained network of independent factory representatives will assist you in determining the right machine for your specific application.

Installation and start-up follows conventional industry practice and normally does not require a factory installation technician.

If requested, factory trained technicians are available for on site service or to assist with equipment installation.

## Customer Service

Our customers are our most valued asset. Trained technicians are available from 7:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday and a phone number is provided for after hour emergencies.

Our factory maintains a complete rebuild service for worn parts which are normally returned within five to seven days after arrival at our facility.

Whether your Montgomery Hog is four years old or forty, we can provide replacement parts and service. We maintain an inventory of most standard replacement parts for immediate shipment. Non-standard parts are built to order.



## INSTALLATIONS IN THESE COUNTRIES

- ARGENTINA • AUSTRALIA • BANGLADESH • BELGIUM • BRAZIL • CANADA
- FINLAND • FORMOSA • FRANCE • GHANA • INDIA • JAPAN • MALAYSIA
- MEXICO • NEW ZEALAND • PHILIPPINE ISLANDS • POLAND • SCOTLAND
- SOUTH AFRICA • SURINAME • SWAZILAND • SWEDEN • UNITED STATES
- VENEZUELA • WEST INDIES

# General Information

## Uses, Applications

Size reduction provides a means of utilizing many types of dry solids which can be reclaimed, recycled, or burned as fuel.

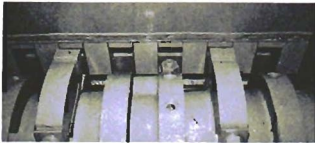


This size reduction is accomplished by a machine called a hog—sometimes referred to as a hammermill, shredder or pulverizer. The derivation of the term “hog” is not accurately known but it may have something to do with the voracious appetite these machines have for devouring waste materials—especially wood waste from sawmills, planing and dimension mills, plywood, veneer, particleboard and wafer-board plants, furniture plants and other wood manufacturing establishments. Hogs are also used to grind bark which is removed from raw logs in sawmills and pulpmills, most of which is burned as fuel although some is sold for horticultural mulch. Other applications are found in shredding corrugated paper, pallet scrap, industrial trash, polyurethane scrap, and many forms of plastics.

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## Principle of Operation

All HD and PM Hogs employ a unique cutting action involving stationary anvils positioned on the side of the machine with rotating teeth (hammers) that pass through rectangular pockets



formed by these anvils. This positive cutting action between the teeth and anvils performs what amounts to the first particle-sizing function in a two stage process.

The anvils are adjustable to maintain the proper tooth-anvil clearance for efficient hogging. The wear surfaces of both teeth and anvils are hardfaced for extra long life, and when worn may be rebuilt at about half the cost of new parts. The hogs will handle light tramp steel 1/4-inch and smaller, nails, small bolts, and steel strapping. A unique internal bronze shear pin arrangement helps minimize the damage from heavy tramp steel.

The second sizing action occurs when the material cut by the action of the teeth against the anvils is directed downward and across a curved particle-sizing screen which fits underneath the rotating element. The screen contains either round or rectangular-shaped openings whose size is determined by the specific application for which the machine is sold. Obviously, small round or square holes are used to produce a smaller particle size; larger round or rectangular opening produce chunky pieces having a greater cross-section and length. The discharge from Montgomery Hogs is generally quite uniform in size, containing a minimum of fines.

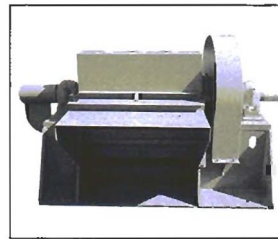
## Ranges of Sizes— HD and PM Series

The HD and PM Models of Montgomery Hogs are available in a variety of infeed openings and widths depending on the type of material to be processed and the model of Hog selected. The standard HD model has an 18-3/4-inch cutting circle,

and the PM model has a 22-inch cutting circle. Both models employ 2-inch-wide cutting teeth fixed to the rotating element in an alternating high-tooth, low-tooth configuration. The teeth grind against corresponding 2-inch-wide stationary anvils mounted on the sides of the housing. The infeed openings on the HD and PM models, measured parallel to the shaft, start with a 10-inch model on the HD, and an 18-inch model on the PM, and increase in 8-inch increments to a 74-inch model.

## Infeed and Discharge Options

All models can be furnished for either gravity infeed or horizontal infeed of the material to be processed, at the customer's discretion. Recognizing the height limitation on gravity infeed

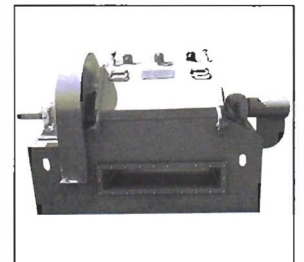


Front View  
Horizontal Eat-Rite Model

conveyors, the basic purpose of the Montgomery Horizontal Feed Hog is to provide a more convenient and efficient method of processing unusually long, flat material through a shredder. Flexible design capabilities (as to hog size, length, and cutting diameters) plus optional feed arrangements result in the widest variety of grinding applications

on almost any type of material. The Montgomery Model “HZF” Hog easily handles lengths over eight feet, eliminating the use of expensive pits or high-incline conveyors. The machine also lends itself to safe manual feeding. The constant rate of feed provided by any of the optional auxiliary feed arrangements available helps control surges which lowers the power requirement and frequently results in a smaller, less expensive Hog being specified. Because there is no overhead feed hopper it is easier to inspect, service and maintain the Hog teeth. Various auxiliary feed conveyor arrangements are available depending on the material being processed. The use of vibrating type conveyors is recommended for most forest products industry applications. For bulky waste paper or corrugated scrap we can furnish a single belt infeed conveyor as an auxiliary component.

Three discharge options are offered in the HD and PM Series. The space saving integral fan model, called a Blo-Hog, is preferred where it is practical to pneumatically convey the material after grinding. The other model, called an Eat-Rite Hog, is arranged for bottom or rear discharge and usually requires a separate fan and fan motor, or other mechanical means, to convey material away from the hog. Integral fan models normally require a V-belt drive because the required shaft speed seldom coincides with the full-load motor speed. Bottom discharge models are normally connected directly to the motor with a flexible coupling which has a lower first cost and requires less maintenance. Both models are normally equipped with a steel flywheel which provides additional energy to carry the rotor through unanticipated surge loads.



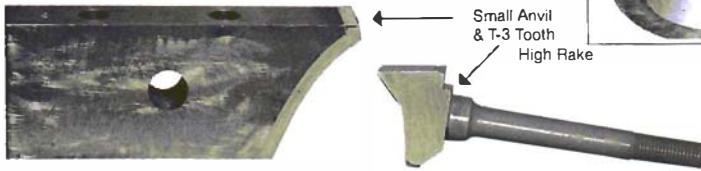
Back View Horizontal Eat-Rite  
Model Rear Discharge



# Construction Details



Light areas indicate hardsurfacing.



Small Anvil & T-3 High Rake

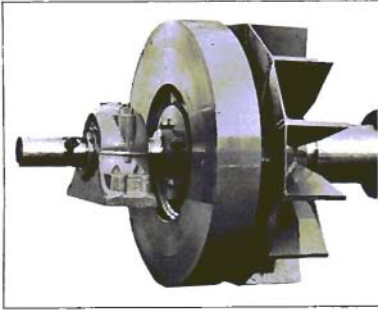


## Principle of Operation

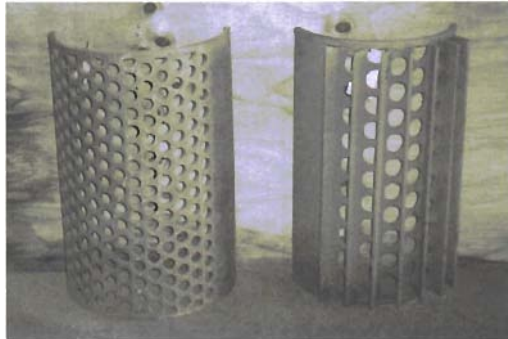
The Montgomery Blo-Hog uses a punch and die cutting action with fixed teeth on the shaft rotating through the slots in the anvils mounted on the lower housing. All wearing parts of the teeth and anvils are built up with hardsurfacing material to provide long service under severe operating conditions. All wearing parts (teeth, anvils, screens, etc.) are designed for easy removal for rebuilding or replacement.

## Rugged Construction

Extra heavy rugged construction assures long life. The fanwheel in the Montgomery Blo-Hog is made from 3/4" steel plate, welded construction, and is balanced both statically and dynamically before leaving the factory. Precision balancing enables use of minimum thickness concrete foundation (normally 12"). The welded steel housing cuts down on weight and space requirements as well as contributing strength to the design of the machine. Flywheel and fanwheel are mounted on the shaft between the bearings, greatly reducing the possibility of bending the shaft.



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## Removable Screens

Particle-sizing screens of any desired size may be selected to produce the end product desired by the customer. The screens are designed for easy removal and replacement. With certain materials, especially where the discharge will be handled by a high pressure blower system or by augers, steel baffles are welded to the bottom of the screens underneath the openings to stop long sticks and slivers from clogging the conveyor.

## Built-In Protection

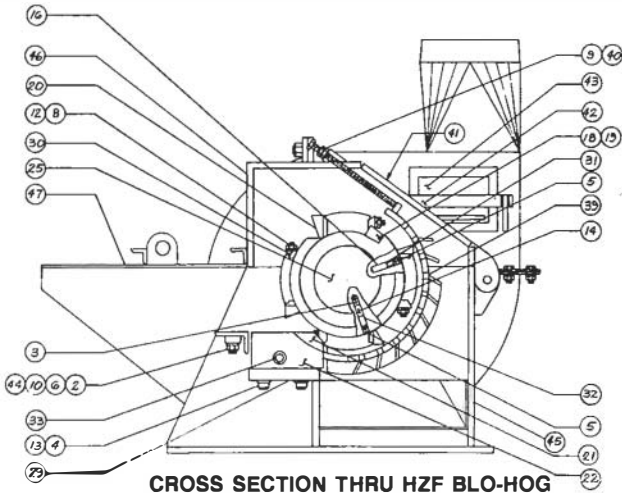
Montgomery Blo-Hogs are protected against damage from heavy tramp steel by a bronze shear pin arrangement. On impact the three one-inch bronze pins holding the breaker ring to the shaft will shear, permitting the ring to turn freely on the shaft. A sealed plastic vial of lubricating oil also ruptures when a shear occurs, providing lubrication between ring and shaft to prevent galling. New shear pins and oil cylinders can be installed in minutes and the hog can resume normal operation. (Refer to cross section drawing and parts list at bottom of this page.)



Reconstructed photo showing result of 1/4" Steel Plate accidentally dropped into upper feed hopper of Montgomery Blo-Hog. Bronze shear pin arrangement minimized damage to the unit.

# Montgomery Model **h-z-f** HOG

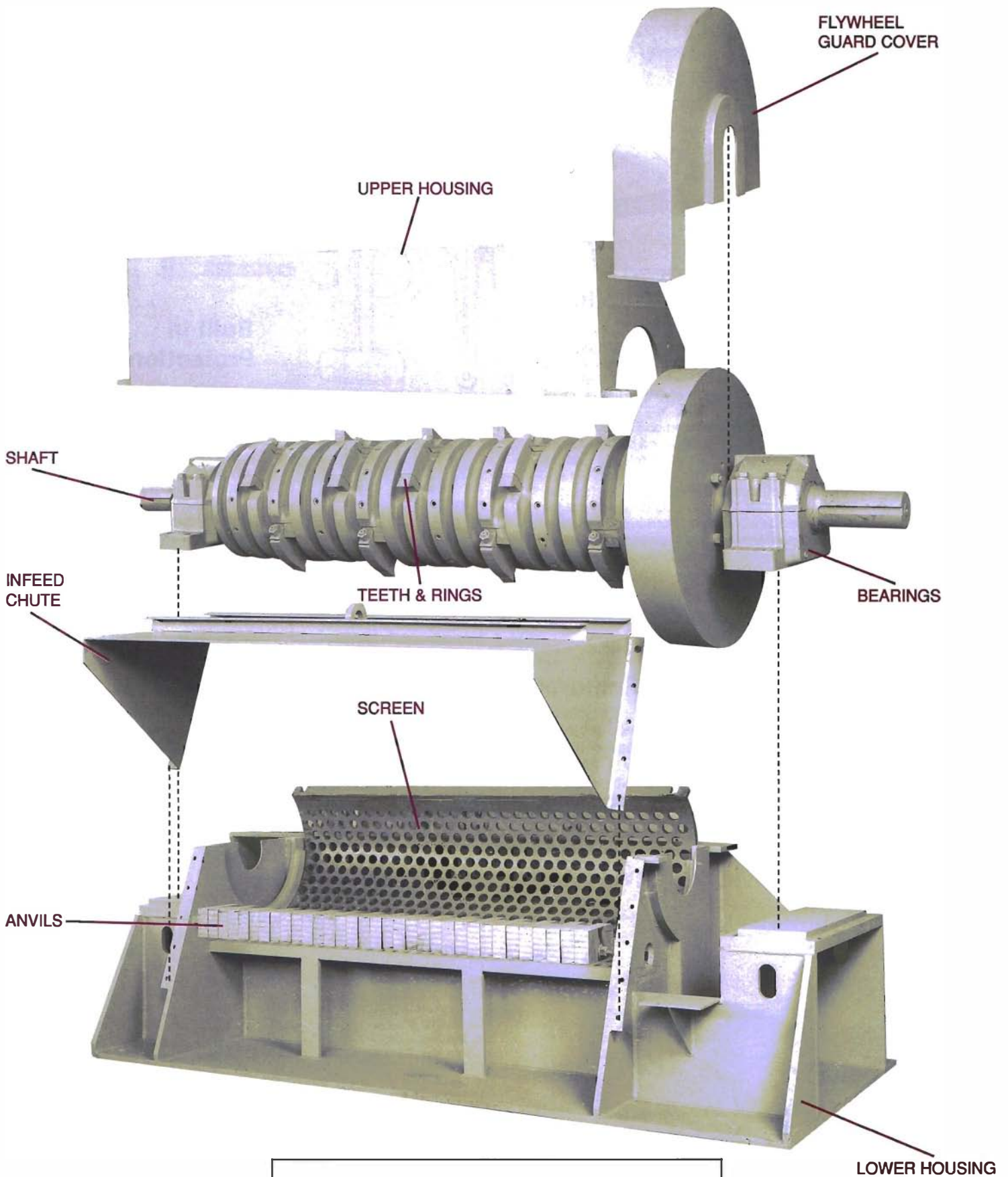
## PARTS LIST



CROSS SECTION THRU HZF BLO-HOG

Ref. No.	Description	Ref. No.	Description
2	Capscrew 3/4" NC x 2-1/2"	22	Anvil, Small
3	Setscrew 3/4" NC x 1-3/4"	25	Shaft
4	Capscrew 7/8" NC x 3"	29	Anvil Plate
5	Setscrew 1-1/8" NF x 1"	30	Wedge
6	3/4" Hex Nut, Heavy	31	Spacer, Oil Cylinder
8	7/8" Hex Nut, Hndd Steel	32	Spacer, Shear pin
9	7/8" Jam Nut	33	Anvil Tie Rod
10	3/4" Lockwasher	39	Screen
12	7/8" Lockwasher	40	Screen Hold-down Bolt
13	7/8" Flatwasher	41	Rear Door
14	Shear pin, Bronze 1" Dia. x 1-1/2"	42	Locking Bar, Inspection Door
16	Oil Cylinder, Plastic 7/8" Dia. x 3"	43	Inspection Door
18	Tooth, Small 1-1/2" x 4"	44	Anvil Stop Assembly
19	Tooth, Small 1-1/2" x 6"	45	Lower Housing
20	Tooth, Large, T-3 High Rake	46	Upper Housing
21	Anvil, Large	47	Infeed Chute

# EXPLODED VIEW OF HORIZONTAL INFEED HOG



MONTGOMERY INDUSTRIES reserves the right to change its designs and any dimensions or materials specified herein are subject to change without prior notice.



*Montgomery*



## Horizontal Infeed Model Hog



### Where to Order

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INTERNATIONAL, INC.**

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