

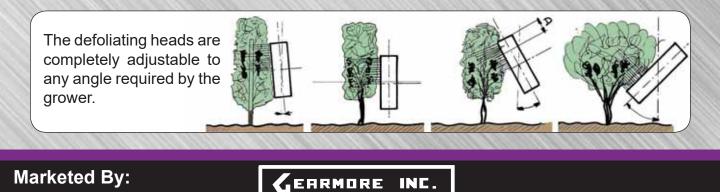
# LEAF REMOVERS

Model E2200F Shown



The patented COLLARD system achieves leaf removal by a flow of low pressure air produced by a 3-point hitch, P.T.O. driven air compressor. The air is blown through the leaves at fruit level by twin rotating nozzles. This rapid pulsing air literally shakes the leaves to pieces and rattles the caps free from the berries. The end results are the leaves are removed around the grape clusters, caps are dislodged from the berries, and the debris is cleaned from the bunches.

The Leaf Remover exposes the clusters to air and sunlight and improves spray penetration. We are able to give all the results like handwork at a fraction of the cost per acre.



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COLLARD

### **HOW THE COLLARD LEAF REMOVER WORKS**

Listening to the Leaf Remover head, the sound is similar to helicopter blades beating. This comes about due to the rotating nozzles discharging short sharp bursts of air (at 15 PSI) into the canopy.

The large diameter, stainless steel defoliating heads turn for adjusting the air diameter from 11 to 23.5 inches. This unique advantage removes the exact amount of leaves required.

It is the alternating blasts of air that makes the leaves flex rapidly.

These rapid pulses of air literally shatters the leaf membrane tissue to pieces.

The end results are the leaves are removed around the grape clusters, caps are dislodged from the berries, and the debris is cleaned from the bunches.

#### **USING THE COLLARD PULSED AIR SYSTEM**

Defoliation at setting of the fruit is the time to direct the air into the fruit zone because the small berries are well spaced and quite tough. This is the best time to remove caps and clean the bunches.

The defoliation head is set 2 to 3 inches away but, parallel to the canopy fruit zone. (See figure 1)

The COLLARD effectively removes the leaves along the fruit zone but allows the canopy immediately above it to mature and to perform the vital photosynthesis.

As the time of bunch closure approaches, then the method is to raise the defoliation heads so that the circle slots are just above the fruit zone. Now the defoliation effect is to let the sunlight into the fruit when the sun is higher and more intense.

To remove more inner leaves, the defoliation head can be pushed into the canopy 2 to 3 inches, but the outlets must be above the fruit zone. (See figure 2)

#### THE COLLARD WAY TO LOWER **COSTS & INCREASE VALUE OF** YOUR CROP

#### Manage of leaf volume and clean bunches

- Bunches cleaned early will have virtually no disease sites
- Opening the canopy earlier ensures good air flow and spray penetration right through the season

#### Berries develop thicker skins earlier

- Thicker skins produce better flavor and character
- Fruit is more resistant to sunburn at peak of summer

#### Makes hand work more productive

- Bunch thinning is 25 to 30% faster
- Hand harvest is up to 40% faster

#### NO CONTACT WITH THE FRUIT

A big issue with competing mechanical leaf pluckers is fruit damage. This is due to guide rollers pressing on delicate bunches or the bunches projecting outward into the leaf cutting blades. The COLLARD Pulsed Air System does not need to press into the canopy. Ours will operate effectively up to 6 inches away.

#### **COLLARD VS. MECHANICAL**

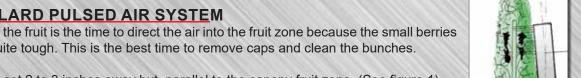
#### COLLARD Pulse Air System

- Minimal fruit contact
- Reaches internal leaves
- Does not cut fruit off
- Can be used early at capfall

#### Suction Type Plucker

- Rollers press on bunches
- Outer leaves only
- Will remove projecting fruit Normally used after 8%
- closed

Specifications Subject To Change Without Notice



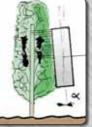


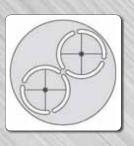
Figure .



Figure 2

#### NO DEBRIS LEFT IN THE CANOPY

The COLLARD Pulsed Air System produces a high volume of air - this wind clears the shattered leaves from the canopy and out into the center of the next row.



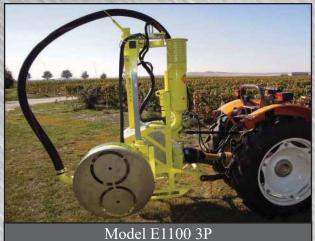
INFORMATION

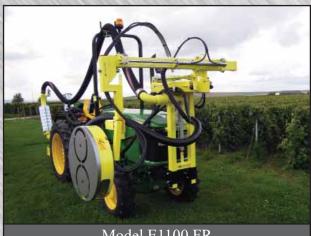
FACTS AND

# **COMPLETE RANGE**



## **COLLARD OFFERS THE WIDEST RANGE** OF LEAF REMOVERS ON THE MARKET





Model E1100 FR





MODEL NUMBER	NO. OF HEADS	POSITION OF HEADS	WORKING POSITION	HEADS REVERSE
E1100 3P	1	Rear	In-Row	Yes
E2200 3P	2	Rear	In-Row	No
E1100 FR	1	Front	In-Row	Yes
E2200 F	2	Front	In-Row	No
E2200 FR	2	Front	In-Row & Over the Row	Yes

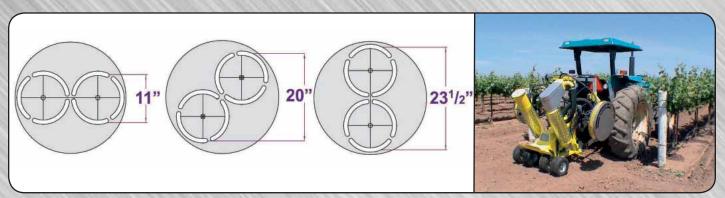
COLLARD produces many other unique Leaf Removers for in-row and over the row tractors. Please contact us with your special requirements.

Specifications Subject To Change Without Notice

# COLLARD DEFOLIATION HEADS & MACHINE FEATURES

# TWIN ROTORS DEFOLIATION HEADS COLLARD PATENT

Now as standard equipment is the Twin Rotors Defoliation Heads with multiple rotors. The advantages are: lower working pressures, less tractor horsepower and faster operating speeds. The heads with stainless steel covers are adjustable air flow diameters of 11 to 23 ½ inches.



## FEATURES

*Form # CD0002-13* 

- Leaf Removers with front or rear mounted defoliation heads
- Machines are available in single or double defoliation heads
- Defoliation heads are available for in-row or over the row applications
- Rapid pulses of low pressure (15 PSI) air shakes the leaves from the foliage
- The stainless steel covered heads are effective up to 6" away from the grape clusters
- Electro hydraulic controls are standard

- Hydraulic adjustment for in and out, up and down, of the defoliating head
- Tractor requirement is 60 HP minimum with hydraulic capacity of 8 GPM at 2400 PSI
- Air compressor is 3-point hitch mounted with 540 RPM P.T.O., 30 H.P. min.
- Compressor has exhaust silencer and air intake filter
- Leaf Removers come with all hoses, fittings and JIC couplers
- Units come with storage/parking stand

Your **COLLARD** Dealer

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