MINI 12 VOLT & HAND CRANK DRY WASHER PRODUCT REPORT MODELS DW212V & DW2

Keene Engineering Model DW212V Battery Operated Dry Washer

Mini Model DW2 Backpacked

Keene Engineering has been the leader in manufacturing a complete line of dry concentrators that has been serving the industry for over 60 years.

Keene's line of “mighty midget' dry washers” have lead the way for a choice of small dry washers that perform much like their big brothers, the famous Model 151 and 140. With our advanced riffle design, marlex construction, and the choice of hand crank or electric operation, there is now a dry washer for everyone’s budget.

The new mini hand crank dry washer Model DW2 weighs only 32 pounds, making it easy to transport to where you want to work. It virtually eliminates the need to bucket material to the area where you have set up your equipment. Instead you can take this equipment to the area you wish to sample.

The mini dry washer’s light weight and compact size, enables it to fit on a pack frame. You can now transport this type of equipment into areas that were once inaccessible. These are the areas that gold would be the most abundant.

All mini models feature a compact folding frame making it easier to set up and place into a backpack.

The heart of the system is the new vibrating cam shaft action which is operated with ease by turning hand crank or by powering it from a 12 volt battery or power source. The battery powered unit can operate with a small motorcycle battery for hours.

New Folding Frame Design

Hand Crank Model Dry Washer

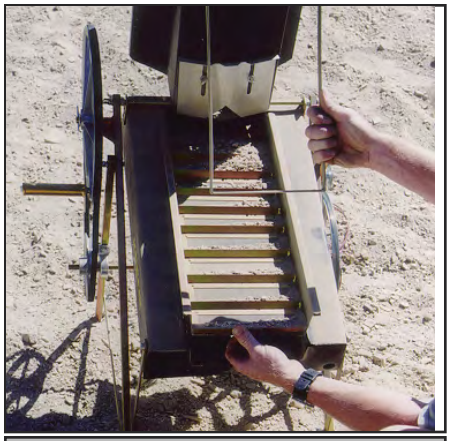
The oversized marlex hopper is equipped with a adjustable flow control gate that provides an even flow of material over the recovery tray. The new and improved riffle system features the same basic design as the larger model dry washers. The riffles are designed with various heights and distances to optimize a variety of different ground conditions. These are some of the features have made the our line of dry washers the leadier in this industry.

To operate at peak efficiency the gravel material should be as dry as possible. There is no need to prescreen the gravels before entering the concentrator, as the expanded metal grizzly located in the hopper does a good job of classifying before entering the recovery tray .

The vibrating action of the cam shaft will cause the heavier material to settle and flow down into the riffle tray. The heavier gold particles will be trapped behind the riffles.

Although you can work for many hours most people like to check to see if they are getting gold after an hour or so.

Cleaning the DW-2 can be simple and quick. Unsnap the front latch and lift the riffle tray to release the rear catch, pull the tray out and empty into a bucket or pan. The riffles can be placed back into place by lifting the latch end and sliding it back in place.



Removing the recovery Tray

Cleaning the recovery tray into a gold pan to check the occurrence of gold in the concentrates.

A quick panning will tell you whether you are getting color or if you should try another spot. Should you decide to move, simply pick up the entire machine and move it to the new location. This is why we have designed this machine with lightweight components.

Some people feel that the “puffer box” or bellows type dry washer recovers more gold than any other type of dry operation. While others agree they feel that turning a crank is a fair amount of work. Keene has overcome this objection by offering the Mini Dry Washer as a hand crank or as combination 12 volt battery operated drive with an optional hand crank.

With addition of the electric 12 volt motor, the weight is still only 40 pounds. The battery is not included but my personal choice would be a deep cell battery for several days of running, however a small motorcycle battery should run for about 4 hours. The weight of the battery is a consideration when backpacking but you have the option of using the hand crank if you are planning a long trip.

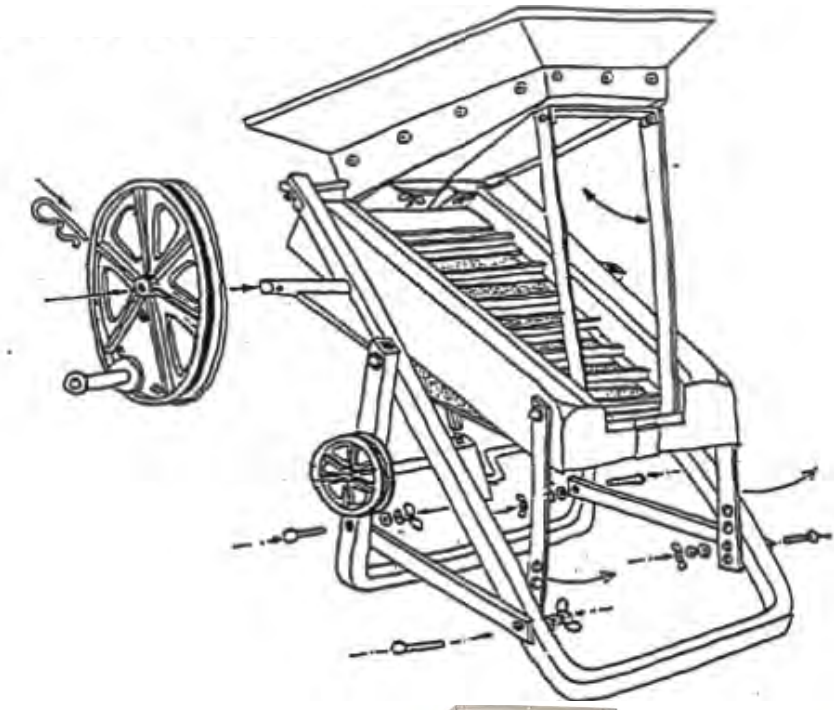
Most machines available on the market today are “either or units” but with Keene’s Combination battery or hand crank, there is no danger of a dead battery spoiling a trip, since you always have the option of using the hand crank.

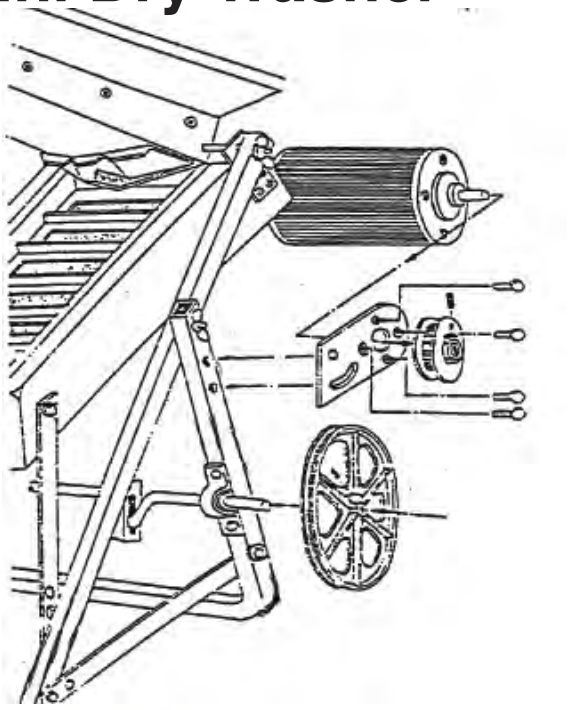
The Keene Mini Dry Washer operates both on gravity as well as electrostatic separation. Gravity separation causes the heavier particles go sink to the bottom including gold values. When the material is “fluffed” up or placed into suspension gravity allows the heavier particles to sink behind the riffles much faster. This action is observed when we see when the bellows blow the light material upwards.

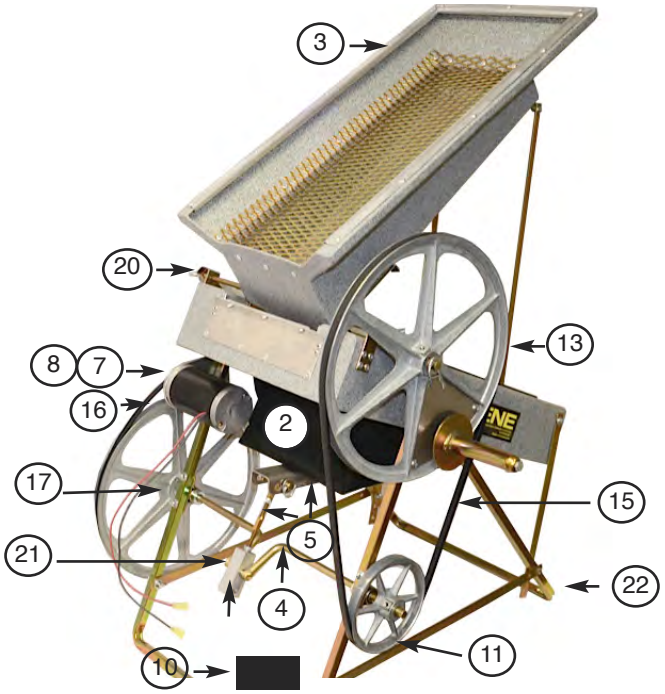
The action of the bellows also creates an electrostatic charge when the air blows through the cloth, that attracts the fine gold. This conductive charge is very much in the same manner as paper is attracted to a comb that has retained a static charge caused by running it through your hair. This combination of recovery principles have made Keene dry washers well known and the leader in fine gold recovery.

Separation of recovery tray

Model DW2 & DW212V Mini Dry Washer







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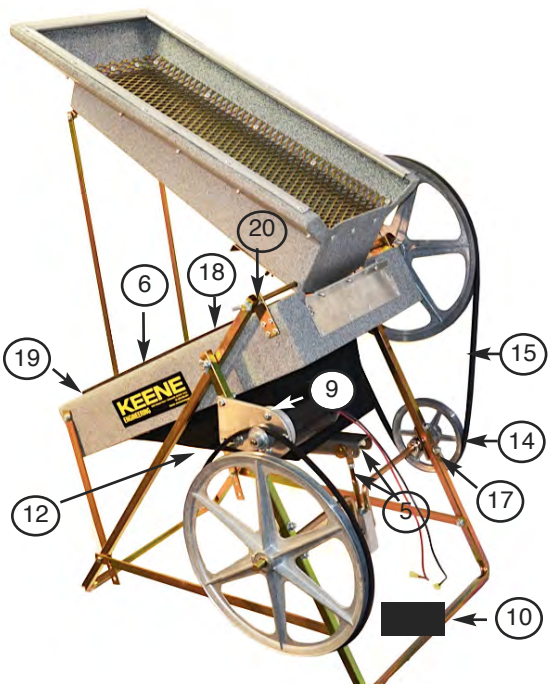

#	QTY	DESCRIPTION	PART#
1	1	CONVERSION KIT TO 212V	DW12C
2	1	BELLOWS	DWBEL
3	1	DW HOPPER	DWCH
4	1	CRANKWHAFT	DWCHS
5	1	ROD & U BRACKET ASSEMBLY	DWRUBA
6	1	DW CLOTH ONLY	DWCK
7	1	12 VOLT MOTOR	DWM
8	1	12 VOLT MOTOR BEARINGS	DWMB
9	1	12 VOLT MOTOR PLATE	DWMP
10	1	ELECTRONIC SPEED CONTROL	DW212SC
11	1	PULLY MOTOR DRIVE	PU2X50

#	QTY	DESCRIPTION	PART#
12	1	PULLEY ELECTRIC DRIVE	PU14X50
13	1	PULLEY HAND CRANK	PU14X75
14	1	PULLEY 6 INCH LOWER	PU6X50
15	1	V BELT 4L620	BELT4L620
16	1	V BELT 3L460	BELT3L460
17	2	PILLOW BLOCK BEARING	DWPB
18	1	DW2 RIFFLE	DWR
19	1	DW1 RECOVERY BOX	DWRB
20	1	DW1 5/16 ROD WITH WING NUT	DWRW
21	1	VIBRATING CAM SHAFT	DWVC
22	1	FRAME ASSEMBLY	DWFA

12 VOLT DRY WASHER INSTRUCTIONS

1. Assemble the dry washer per illustration.
   If the dry washer is being used as a hand crank mode make sure that the belt to the 12 volt motor is disconnected. If the dry washer is being used in the 12 volt mode be sure to remove the hand crank pulley.
2. Place dry washer as level as possible.
3. Set the pitch of the hopper so the larger rocks roll off and the smaller material, falls through the classifier screen.
4. Attach the red connector to the + side of the battery and black connector to the negative side of the battery.
5. If used in the hand crank mode, you should turn the hand crank at approximately 45 revolutions per minute.
6. Adjust the flow gate so that a consistant amount of material flows in the the recovery tray. Feed the hopper so that there is alway a consistant flow of material into the recovery tray for optimum recovery.
7. Keep runing the drywasher untile all material ran through the feed hopper.
8. Unsnap the lower lip of the dry washer riffle and remove the recovery tray.
9. Remove material from the riffle board by placing the riffle board vertically position and tapping against the bottom of the tub. A small paint brush also can help clean the riffle board.