

4" MOUNTAIN GOAT PORTABLE TROMMEL

SPECIFICATIONS	
LENGTH WITH HOPPER INSTALLED	32"
SPIRAL BARREL DIAMETER	4"
NORMAL HEIGHT WITH ADUSTER LEGS	24"
WIDTH AT BOTTOM	16"
NET WEIGHT IN POUNDS	18
SHIPPING WEIGHT IN POUNDS	20
MOTOR STARTING AMPERAGE	4
MOTOR RUNNING AMPERAGE	3
D. C. VOLTAGE REQUIRED	12
PUMP STARTING AMPERAGE	3
PUMP RUNNING AMPERAGE	2
CAPACITY IN YARDS OF GRAVEL DAILY	2



750 GPH SUMERGIBLE WITH 3AG 6 AMP INLINE FUSE

FRONT LEGS ADJUSTABLE UP TO 4"

POWERED BY YOUR 17 AMP (OR LARGER) 12-VOLT BATTERY OR DC POWER SUPPLY



SWITCH

6 AM

PUMP POWER STUD

6 AMP FUSE

PUMP POWER STUD

+ pump clip

NEW ON THIS MODEL:
 METAL RETRACTABLE LEGS ADJUST TO 3 HEIGHTS.
 HANDLE NOW MOLDED INTO THE TROMMEL BODY
 LOGO ENGRAVED ON BOTH SIDES OF TROMMEL.

Don't let the size and weight fool you!! The Mountain Goat can eat as much as two yards of placer gravel and spit out as little as ten pounds of concentrates in only 8 hours. It is light enough (16 pounds) to tote up a mountain by one person. It runs on 12-volt battery power and can be set up to recirculate as little as 5 gallons of water. (750 GPH pump is included)

ARCHIMEDES SCREW FEEDS CONCENTRATES INTO THIS TRAY

WATER SHOULD OVERFLOW INTO BLACK TUB. PUMP SHOULD ALWAYS BE BELOW WATER LEVEL.



TAILINGS BUCKET

SUGGESTED WATER RECIRCULATING SYSTEM
 When using the Mountain Goat Trommel away from a running water source, we suggest you purchase a concrete mixing tub (the large size) and a bucket from your local Home Depot or Lowes. The tailings bucket must be emptied before overflowing to keep gravel out of the water supply. You should also slip a sock over the pump to help keep the the spray system from clogging up.

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OVERVIEW

The Mountain Goat Trommel is a miniature version of the huge trommels used by most major placer mining companies. These multi-million dollar machines have proven themselves for over 100 years as the most efficient concentrator for placer gold mining.

A few years ago we developed a small version trommel that can be carried by one man into remote placer prospects.



BUILT-IN LEGS



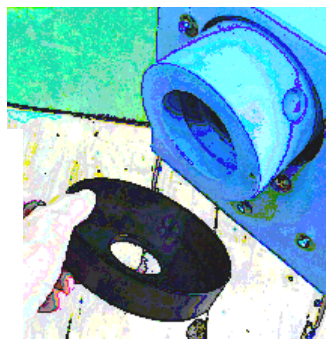
ADJUSTABLE FRONT LEGS



LEGS RETRACTED



OPTIONAL SPOUT FOR TROMMEL TO FEED DESERT FOX



NUGGET TRAP



REGULAR HEIGHT



OPTIONAL 7-AMP POWER SUPPLY



EASILY USED BY DISABLED PERSON



EXTENDED HEIGHT

SET UP INSTRUCTIONS FOR 3" AND 4" TROMMEL

①



HOPPER IS ATTACHED TO THE TROMMEL WITH TWO ENCAPSULATED WING BOLTS. INSERT THE HOPPER INTO THE TROMMEL BARRELS SHOWN AND THREAD THE WING BOLTS INTO THE COUPLING NUTS ON EACH SIDE OF THE BARREL

②



CONNECT PUMP CLIPS TO THESE POWER STUDS. RED CLIP TO RED STUD...BLACK CLIP TO BLACK STUD

③



CONNECT POWER CLIPS TO YOUR 12-VOLT BATTERY. RED CLIP GOES ON THE POSITIVE POLE (+) OF THE BATTERY. BLACK CLIP GOES ON THE NEGATIVE (-) POLE.

④

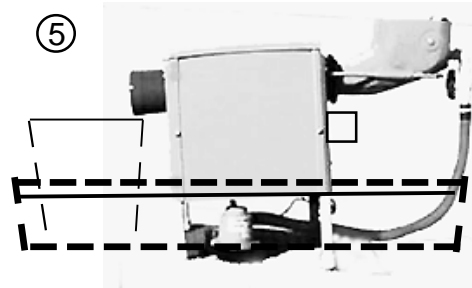


INCREASE THE PITCH FOR RICHER CONCENTRATES



THE LEG EXTENSION BOLTS ALLOW ADJUSTMENT OF THE PITCH OF THE TROMMEL

⑤



PLACE TROMMEL IN STREAM OR TUB WITH WATER LEVEL DEEP ENOUGH TO COMPLETELY COVER PUMP

⑥

TURN SWITCH ON AND THE PUMP PUMPS WATER THRU TURNING TROMMEL BARREL.

⑦

FEED PLACER GRAVEL INTO HOPPER AS FAST AS YOU WISH AS LONG AS THE MATERIAL IS WASHING OUT OF HOPPER. THE LARGEST MATERIAL THAT CAN BE ADDED IS ONE INCH MINUS BUT YOU WILL HAVE OPTIMUM RESULTS IF YOU CLASSIFY YOUR PLACER GRAVEL TO 1/4" MINUS. **REMEMBER THAT YOUR CONCENTRATES SPILL OUT OF THE TROMMEL BARREL END JUST BELOW THE HOPPER AND YOU MUST EMPTY THE CONCENTRATES TRAY ATTACHED.**

SPRAY SYSTEM MAINTENANCE:

Using a **ladies stocking** over the pump will prevent the spray system holes from clogging most of the time. If any of the holes do clog up, the following pictures show you how to clean them. The pump is fused with a 5 amp, 3AG fuse. Do not replace with larger amperage fuse.



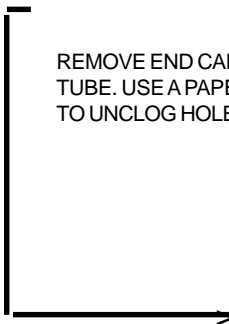
Installing stocking

REMOVE END CAP AND FLUSH OUT TUBE. USE A PAPER CLIP OR NAIL TO UNCLOG HOLES

REMOVE HOPPER FROM TROMMEL

REMOVE END CAPS FROM T-BAR

CLEAR DIRT FROM TUBE, USE A PAPER CLIP TO CLEAN HOLES



4" MOUNTAIN GOAT TROMMEL

CHANGING THE DRIVE BELT



SHAFT SLEEVE

REMOVE BOTTOM PANEL, BY REMOVING 4 SCREWS. PASS NEW BELT OVER THE SPIRAL BARREL. LOOSEN THE TWO HOSE CLAMPS ON THE SHAFT SLEEVE AND SLIDE IT UNTIL THE SHAFT SEPARATES AND THEN PASS THE BELT THROUGH THE OPENING. REPLACE THE SHAFT SLEEVE TO ORIGINAL POSITION AND THEN STRETCH BELT OVER THE BARREL PULLEY AND THE MOTOR PULLEY. REPLACE BOTTOM PANEL.

2 EXTRA BELTS ARE INCLUDED WITH EACH NEW TROMMEL. ADDITIONAL BELTS ARE AVAILABLE.

LIMITED WARRANTY

CAMEL MINING PRODUCTS Inc. WILL REPAIR OR REPLACE ANY MOUNTAIN GOAT TROMMEL RETURNED TO US FOR A PERIOD OF ONE YEAR AFTER PURCHASE.

CONDITIONS:

WARRANTY COVERS PARTS AND LABOR EXCEPT IN CASES OF OBVIOUS ABUSE OR NEGLIGENCE. MACHINE MUST BE STORED INSIDE AND OUT OF WEATHER WHEN NOT IN USE. WARRANTY COVERS ONLY ORIGINAL PURCHASER.

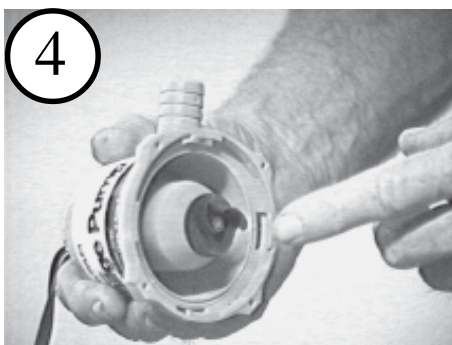
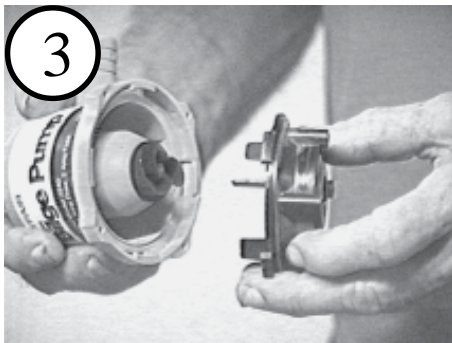
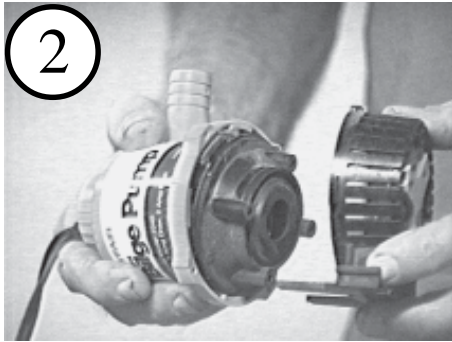
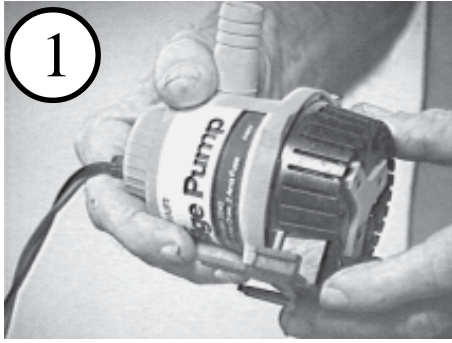
HOW TO OBTAIN WARRANTY REPAIRS:

CALL 1-800-331-5311 FOR RETURN AUTHORITY NUMBER. YOU WILL BE GIVEN THE ADDRESS TO SEND THE MACHINE. YOU MUST INCLUDE POSTAGE TO RETURN THE MACHINE TO YOU AFTER REPAIR.

PUMP WARRANTY:

THE PUMP IS COVERED BY SEPARATE WARRANTY FROM THE MANUFACTURER, SEE INSTRUCTION SHEET FURNISHED BY THEM TO OBTAIN WARRANTY REPAIRS.

Pump Care and Maintenance



Introduction...

Camel Mining Products selected the Mayfair line of marine bilge pumps and they perform well in our panning machines. However, there are occasionally problems, usually from leaves, small rocks or sticks that get sucked into the pump and clog or jam the turbine chamber. Nearly always, problems of this sort will result in a blown fuse and must be cleared before the fuse is replaced and the pump put back into service. The fuse supplied is 6 amp 3AG.

The five simple steps detailed here will keep your pump in operating condition for many seasons. The pumps which are supplied with Camel products are manufactured by Mayfair and are warranted by them, NOT by Camel Mining Products, any pump warranty claims should be made directly to Mayfair, a Mayfair warranty registration form was included with the instructions to this machine.

Follow the steps below, each step is keyed to a photo on the left side of this page.

Step No. 1 photo No. 1

Grasp the pump firmly with one hand and the black base of the pump firmly with the other. Twist the base of the pump clockwise until it clicks open.

Step No. 2 photo No. 2

Remove the base cover from the pump. Remove any foreign materials which may be lodged in this part of the pump. The base of the pump is a strainer or screen that is designed to keep debris from entering the turbine cavity of the pump.

Step No. 3 photo No. 3

The turbine housing of the pump is a black part on the bottom of the pump under the base cover. It must be gently lifted and turned to be removed as it is keyed into the yellow pump housing like the base screen was but it is also pushed into a blind recess which will prevent it from turning. It must be lifted and then turned to unlock it from the pump housing.

Step No. 4 photo No. 4

Clean any debris or foreign materials which may be blocking the pump impeller. The impeller has three small blades, take care not to damage them. The impeller should turn freely. If it does not turn freely then there is a possibility that your pump is damaged and must be returned to the factory.

Step No. 5 photo No. 5

Reassemble the pump in the reverse order of the above steps. Install a clean nylon stocking over the pump to keep trash and debris from entering the pump through the screen.

TROUBLE SHOOTING

With hundreds of these trommels in operation in all parts of the world under different working conditions, we have collected reports of problems that have occurred. We have condensed these reports into several categories with the resolution or solution of such problem reports. Please review this information before calling our tech support and perhaps it will answer your questions.

PROBLEM: Loss of gold into tailings bucket. and failure to concentrate properly.

First report: The customer was operating the machine with the front legs extended to the maximum length and the material he was feeding into the hopper had many flat, thin flakes of gold. The river water he was using was extremely “hard” and he was not using any kind of wetting agent.

Solution: At our suggestion, the customer shortened the front legs back to the factory default length and added some Jet Dry surfactant to his water. Gold loss in tailings dropped dramatically. A few flat flakes were still lost but they were extremely thin and flat with almost no weight.

Second report: Customer complained he was losing a lot of “gold” in the tailings and getting almost none in concentrates catch pan.

Solution: The customer sent us ten pounds of the material he was running. The material was loaded with pyrite and mica flakes which looked like gold when the sun was shining on it. THERE WAS NOT EVEN A TRACE OF GOLD IN THE WHOLE TEN POUNDS. We explained how to tell the difference between gold and “fool’s gold.”

Third report: The trommel was producing concentrates too fast and very little tailings,

Solution: The customer was running the trommel directly from a 6 amp battery charger without a battery in the circuit. Most battery chargers give out 18 volts and the trommel is designed to operate on 12 volts. The trommel was running 150% the normal speed and kicking out the material too fast to be concentrated.

PROBLEM: The trommel slows down after less than one hour.

Solution: The operator was using a small amperage battery. Any 12-volt device will slow down as the battery runs down. In this case he was using a 4 ampere battery and the trommel consumes about 5 amperes per hour. We recommend you use a battery with at least 17 amperes OR MORE. This battery will run the machine about 3 hours at the right speed. Of course, the larger the battery, the longer the machine will run at the right speed.

TIP: Always make sure that the red clip is on the positive (+) side of the battery. If you reverse the clips the barrel and the pump will turn backwards and no concentrates will be generated.

TIP: Use a wetting agent in your water supply to prevent fine gold from floating out into the tailings.

TIP: If you are running oily beach sand, add a tablespoon of 409 cleaning solution to your water supply.

TIP: Do not put rocks larger than 1/2” into the hopper. Larger rocks can jam the riffles against the spray tube and cause you to have to shut down to clear the jam.