Owners's Manual

VIPER
TRIDENT

ALL PURPOSE –
Land • Beach • Water • Diving
Metal Detector

Fully Automatic –
Easy-to-Use!

Super Advanced System
. . . More Depth!

www.kellycodetectors.com

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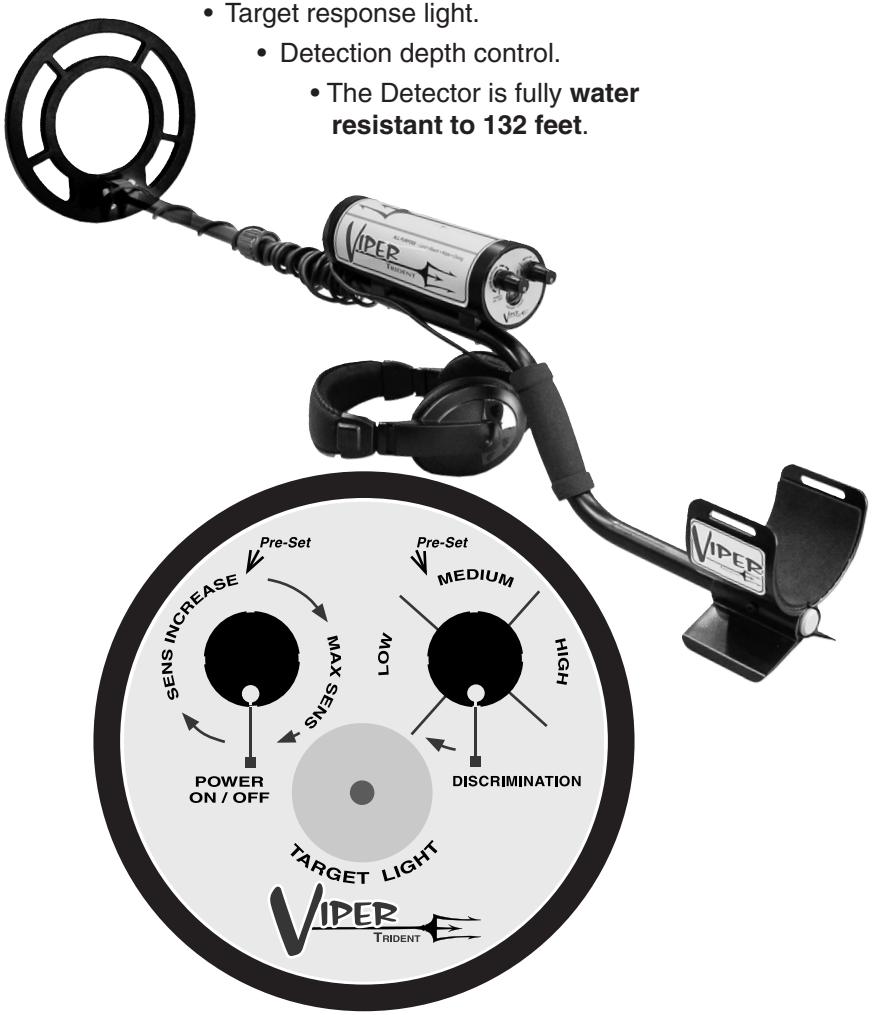
The **Viper** TRIDENT is a high powered underwater metal detector that is easy to use. With a fully automatic circuitry that handles the ground balancing and tuning for you. The **Viper** TRIDENT is perfect for hunting on any wet beach or where high moisture becomes a problem.

Exclusive Features of the Viper TRIDENT:

- State-of-the-art high reliable circuitry.
- Full automatic tuning.
- Full automatic ground balancing.
- Full range VLF discrimination.
- Target response light.
- Detection depth control.
- The Detector is fully **water resistant to 132 feet**.



GLOSSARY OF TERMS

Air Test - A sensitivity test performed by outwardly moving various sized metal samples under the metal detector searchcoil to measure the distance limit of detection. This test is not always an accurate indicator of ground depth penetration capability. (*See Bench Test*)

Alkaline - A class of battery characterized by the ability to sustain longer periods of current drain and greater storage life when compared to the standard carbon-zinc type.

Bench Test - An air test to determine at what discriminate settings various metal samples are rejected or accepted. The test is conducted in a non-metallic area.

Cache - Any intentionally buried or secreted hoard of valuables.

Conductivity - The measure of a metal target's ability to allow eddy current generation on its surface.

Control Housing - A metal or plastic box which holds circuit boards, indicators, meter, controls and power supply.

Depth Penetration - The greatest measure of metal detector ability to transmit an electromagnetic field into the soil matrix and produce a target signal.

Discrimination - Adjustable circuitry which ignores or nulls audio responses from a specific conductivity range allowing positive responses to be heard from metals higher in conductivity above the discriminate control setting. Designed primarily to eliminate audio response from trash metals.

Double Blip - A signal characteristic common to elongated ferrous targets such as nails detected in the all-metal non-motion mode.

Faint Signal - A sound characteristic of targets that are sometimes deeply buried or very small in size.

False Signal - An erroneous signal created by automatic retuning overshoot, ground voids or highly mineralized hot rocks.

Ferrous - Descriptive of any iron or iron bearing material.

Metal - Metallic substances; iron, foil, nickel, aluminum, gold, brass, lead, copper, silver, etc.

Metal Detectorist - A person operating a metal detector in the field. This name is preferred by many over Treasure Hunter.

Mineralized Ground - any soil that contains conductive or non-conductive components.

Motion Discriminator - A detector type that requires searchcoil motion to activate its simultaneous ground balance and discriminate functions.

Non-Ferrous - Not of iron. Metals of the precious class (i.e. gold, silver, copper, etc.)

Pinpointing - Finding the exact target location with respect to a searchcoil's designated center. Accomplished by interpreting the centers of audio response width in perpendicular direction or scans.

Searchcoil - A circular (can be other shapes) plastic housing containing single or multiple transmit and receive windings in a specific orientation or configuration to emit and receive signals from ground and targets. (also called loop or coil).

Searchcoil Cable - An electrostatically shielded cable of conductors (wires) which convey signals to/from the searchcoil or control housing.

Sensitivity - The measure or capacity of a metal detector to perceive changes in conductivity within the detection pattern. Generally, the more sensitivity a detector can smoothly provide, the more depth it will achieve.

Signal - An audio response or visual indication alerting the operator that a target has been detected.

Slow Motion - A description of searchcoil speed required to operate the motion discriminate mode.

Sweep - the motion one employs in moving the coil.

MIND YOUR MANNERS

Filling holes and obeying *NO TRESPASSING* Signs are but 2 requirements of a dedicated metal detector hobbyist. A sincere request that Kellyco makes to every user of a detector is that each place searched be left in a better condition that it was found. Thousands of individuals and organizations have adopted this formal.

Metal Detector Operators Code of Ethics:

• I will respect private and public property, all historical and archaeological sites and will do no metal detecting on these lands without proper permission.

• I will keep informed on and obey all laws, regulations and rules governing federal, state and local public lands.

• I will aid law enforcement officials whenever possible.

• I will cause no willful damage to property of any kind, including fences, signs and buildings and will always fill holes I dig.

• I will not destroy property, buildings or the remains of ghost towns or other deserted structures.

• I will not leave litter or uncovered items lying around. I will carry all trash and dug targets with me when I leave each search area.

• I will observe the golden rule, using good outdoor manners and conducting myself at all times in a manner which will add to the stature and public image of all people engages in the field of metal detection.

Warning!

Any metal detector may detect underground power lines, explosives or other items which when struck could cause personal injury. When searching for treasure with your detector, observe these precautions:

Do not hunt in an area where you believe there may be shallowly buried underground electric lines or pipes.

Do not hunt in a military zone where bombs or other explosives may be buried.

Avoid striking any line known to be or suspected to be carrying electrical power.

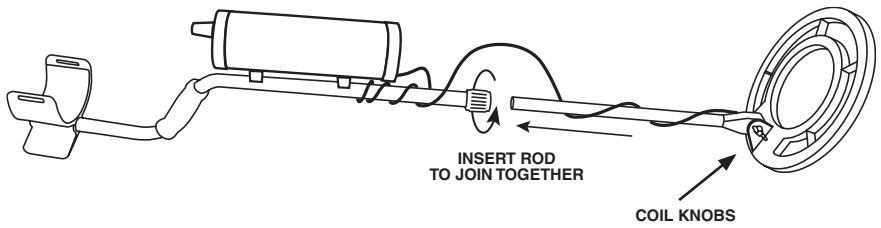
Do not disturb any pipeline, particularly if it could be carrying flammable gas or liquid.

Use reasonable caution in digging toward any target, particularly in areas where you are uncertain of underground conditions.

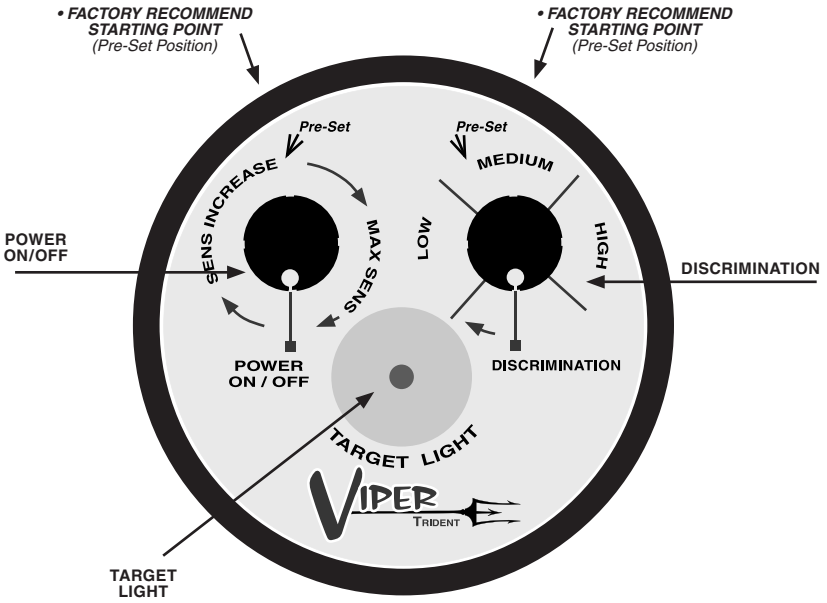
ASSEMBLY —

The detector is shipped fully assembled in one carton. Only two adjustments are necessary, and no tools are required.

1. Turn the search coil to the scanning position. It may be necessary to loosen the knobs securing the coil and then tighten them again. Make sure that the knobs are tightened (by hand) securely after the search coil is positioned.

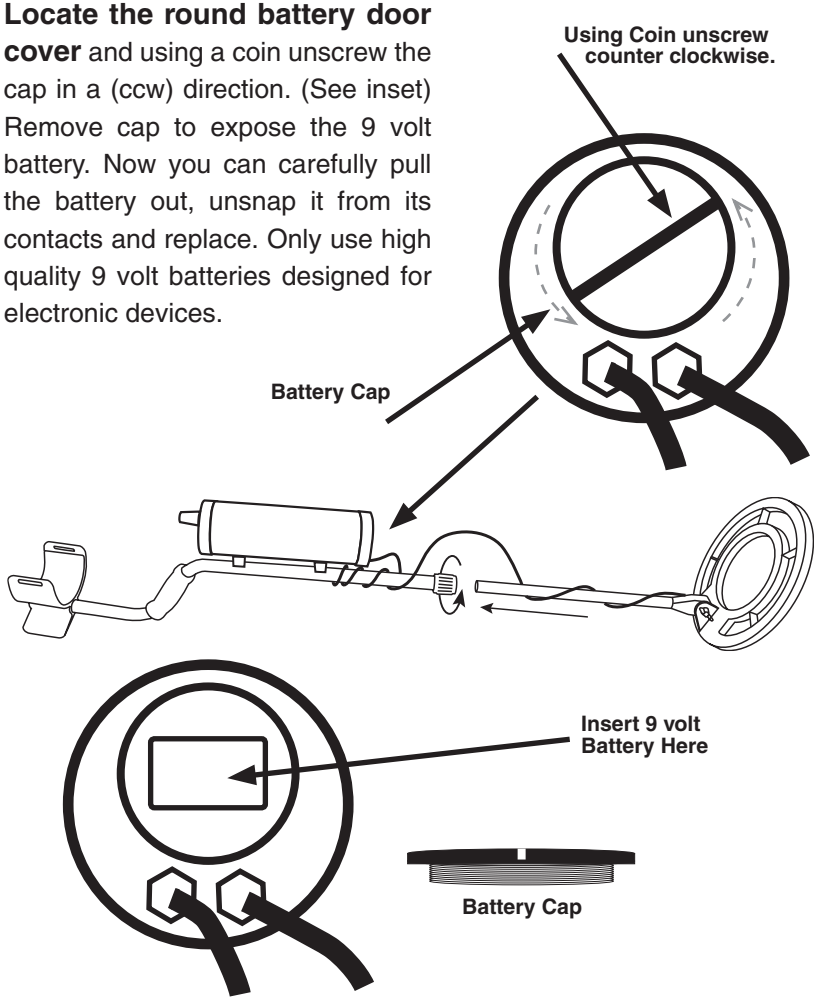


CONTROL PANEL —



INSTALLING THE BATTERY –

Locate the round battery door cover and using a coin unscrew the cap in a (ccw) direction. (See inset) Remove cap to expose the 9 volt battery. Now you can carefully pull the battery out, unsnap it from its contacts and replace. Only use high quality 9 volt batteries designed for electronic devices.



Screw battery cap back on in a (cw) direction, making sure you tighten it down just enough to compress the round rubber o-ring on the battery door itself.

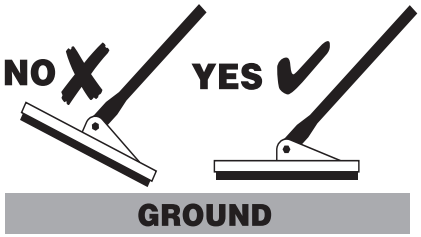
NOTE: Any time you replace the battery please wipe any dust or sand away from the cap threads and the o-ring surface.

Battery Test Feature –

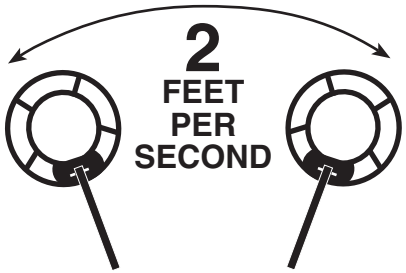
The **Viper** TRIDENT has a **built-in automatic battery testing circuit**. When the batteries get below 7.2 volts you will hear, through the headphones, a continuous 400 Hz tone. When the tone is heard it is time to replace the battery with a new one.

IN THE FIELD TIP FOR USING YOUR Viper TRIDENT

1. Always keep the bottom of the coil level with the ground. Try to maintain coil 1 inch off the ground at all times. You do not need to scrub the ground with the coil.



2. The Viper TRIDENT is an Ultra Slow Motion Metal Detector. When using this detector the coil must be in motion to detect any target. A sweep speed of about 2 feet per second is perfect. You can hunt as fast as you want or as your pace dictates.

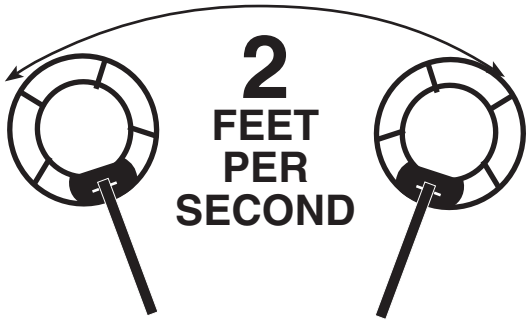


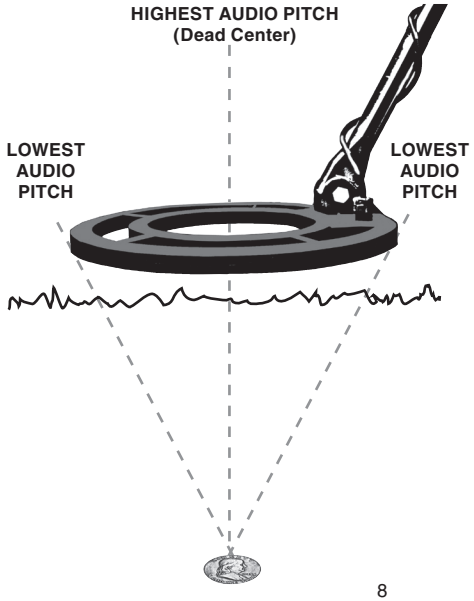
3. Correct arm position. Adjust the lower stem so that your arm is hanging in a comfortable position by your side with the coil about 1 inch off the ground.

USING THE Viper TRIDENT ALL PURPOSE METAL DETECTOR —

The **Viper** TRIDENT is a slow motion type detector, in other words the coil must be in slow motion to respond to any target. By simply moving the coil back and forth over the ground this motion will activate the automatic ground balance and tuning circuits of you detector and keep it at its optimum tuning levels. When scanning the ground try to keep the search coil about 1 inch off the ground. **DO NOT** scrub the ground, you may get some "False Signals" by doing that. Please refer to the following drawings for the correct way to sweep and hold your metal detector.

Simply moving the coil back and forth over the ground.

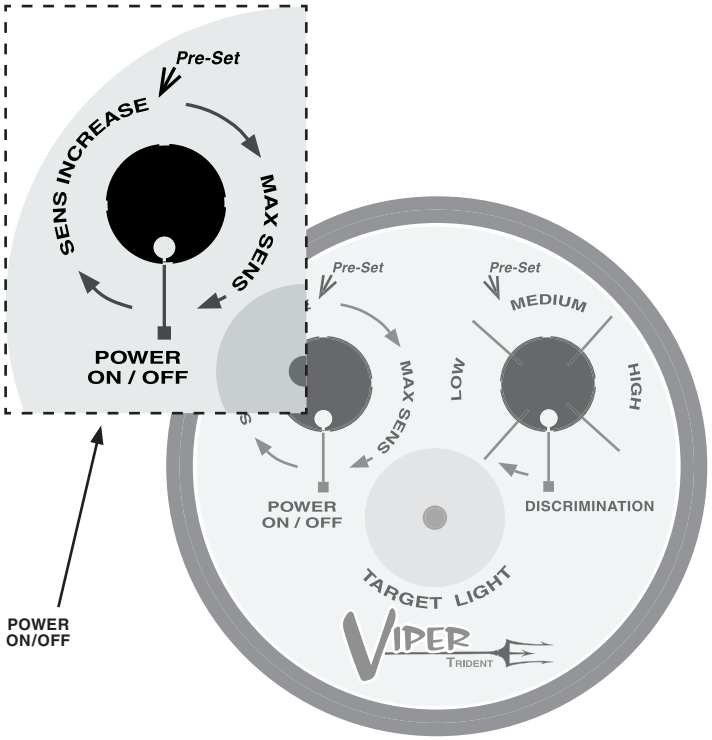




Keep the search coil about 1 inch off the ground.

OPERATION OF CONTROLS —

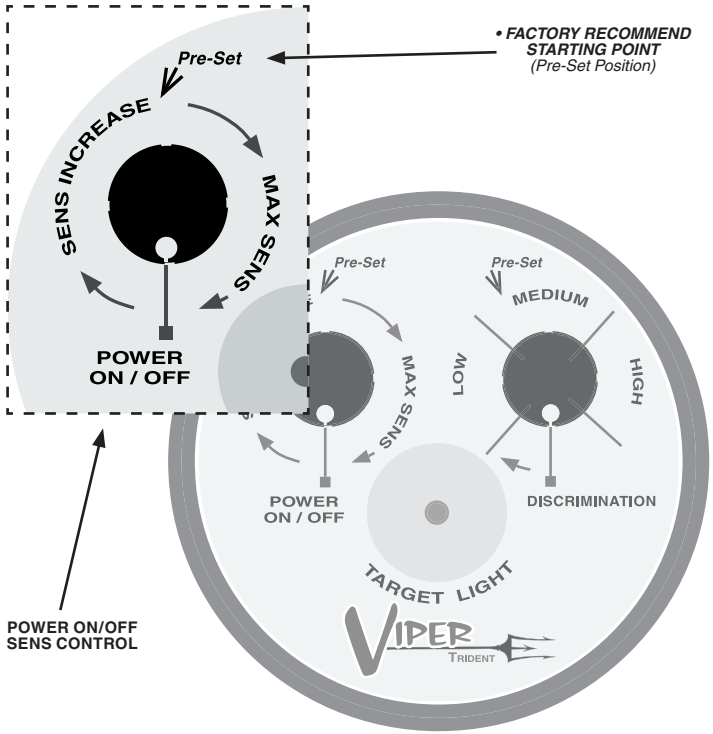
Power ON and OFF
SENS Control



To operate and turn on the **Viper** TRIDENT simply turn the power ON/OFF knob in a clockwise direction.

After you have turned on the **Viper** TRIDENT you should now adjust the **SENS Control** to **Pre-set** position. This is only a starting point and will help you get familiar with your new **Viper** TRIDENT All Purpose detector.

ADVANCED OPERATION OF THE Viper TRIDENT ON/OFF SENSITIVITY CONTROL –



As you know, this control has 2 functions, to turn the **Viper** TRIDENT metal detector on and off and also enables you to set the amount of operating sensitivity (SENS). It is recommended that you start out in the Factory recommended starting point or pre-set position marked on the detector itself. By starting out at the pre-set point the **Viper** TRIDENT is set at the normal detection depth range. The normal range is good for most soil conditions, but by increasing this control clockwise to the maximum position you will get better depth on older coins. This control is extremely helpful in elimination false signals caused by high minerals. If you are experiencing false signals you should decrease this control until these signals are minimized.

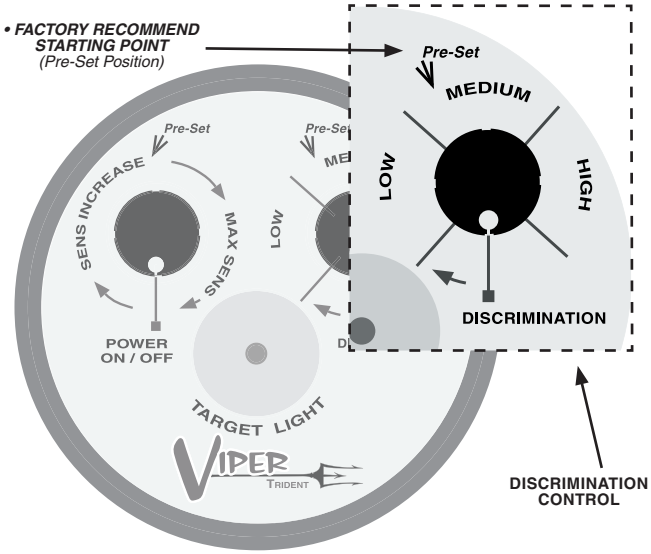
NOTE: Some "False Signals" are normal, particularly on Salt Water Beaches.

OPERATION OF THE DISCRIMINATION CONTROL –

The DISCRIMINATE Control works in the 3 different Zones. The **Viper** TRIDENT has been designed to be easy to use by dividing it into 3 discrimination (at a glance) zones. Each Zone has a minimum and maximum range and the discriminate information below will give you a guideline as what targets are accepted or rejected in each given Zone. Each Zone can be fine-tuned by the operator to accept or reject most trash targets. If you want to hunt in All-Metal you simply rotate the discrimination control fully counter clockwise position.

NOTE: *Most Eliminated Trash Targets will give a broken or chattered sound when discriminated, this is normal and is a design feature of this underwater detector. It was designed this way so you can easily identify trash targets. Some trash targets will give NO sounds at all. Practice using the Elimination control by putting some different coins and trash items on the ground in a straight line about 10 inches apart. Pass each item once and then come back and increase the elimination control knob little by little and listen to the changes in the audio response on the trash targets as you keep increasing this control. Remember even good targets can be eliminated at the maximum discrimination settings.*

TIP: Always keep the Trash Elimination Control at its lowest possible settings so you will not reject nickels and small gold rings.



LOW ZONE –

Will Pickup: All Coins • Most All Gold and Silver Rings • Nickels • Larger Foil • Larger Iron • All Silver Coins.
Will Reject Most: Small Iron Targets • Some Tiny Foil Targets • Some Very Rusty Bottle Caps.

MEDIUM ZONE –

Will Pickup: Most Larger Gold Rings, Penny, Dimes, Quarters, Half and Dollar Coins.
Will Reject Most: Small Foil Targets • Most Bottle Caps • Most Pull Tabs • Nickels and Small Gold Rings.

HIGH ZONE –

Will Pickup: Most Larger Coins Like Clad and Silver • Silver Rings.
Will Reject Most: Gold Items • Nickels • Small Foil • Most Iron Targets • Bottle Caps • Pull Tabs.