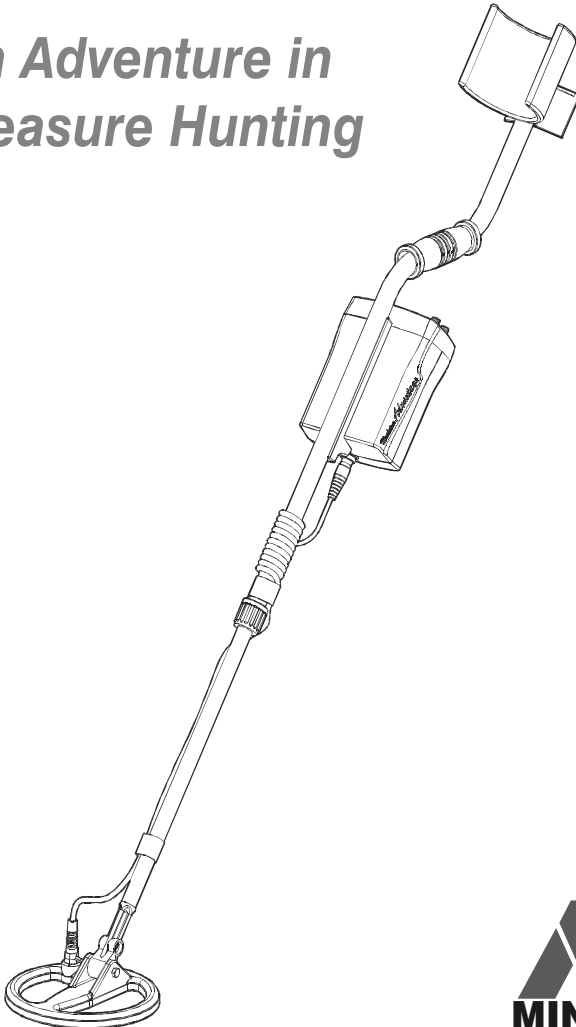


The Minelab Musketeer Advantage

*An Adventure in
Treasure Hunting*



INSTRUCTION MANUAL



The Minelab Musketeer Advantage Instruction Manual

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WARNING

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Introduction

Congratulations on purchasing the *Musketeer Advantage*. This metal detector has been designed for general-purpose treasure hunting and the main features include **lightweight construction, sharp target response, simplified controls** for easy operation, and **substantial depth capabilities**.

Your *Advantage* detector is designed to locate valuable metal objects in high trash areas. These conditions are commonly encountered by treasure hunters in places that have been inhabited for long periods or by armies using the areas as camping grounds or battlefields.

The *Advantage* detector has been designed to serve the needs of both the speed hunter and the slow motion hunter. Units may be moved at a “rapid hunt” pace or at a much more “leisurely” pace while enjoying the sharp target response in either mode – without sacrificing depth capabilities. You will be surprised at how well the depth capabilities of the *Advantage* will challenge units currently on the market!

The operating frequency of your *Advantage* has been set at 5 kHz. This frequency has been chosen for its high level of sensitivity to large ferrous targets as well as coins, jewellery, and other valuable non-ferrous objects, while still being able to accurately discriminate against trash.

With the *Advantage* detector, Minelab has set out to provide you with a high performance, easily operated, lightweight detector, which is available at a realistic price. To be a successful treasure hunter you must completely understand your detector’s features and operation, research your intended hunt area, and respect the environment while you are hunting. We at Minelab are confident that the *Advantage* will provide you with hours of enjoyment for all types of hunting; whether it is on the beach, in the country, or in a competition hunt.

If you have any questions or comments we would like to hear from you. Please contact your local Authorised Minelab Dealer or write to us directly.

We wish you every success in your treasure hunting.

List of Parts

The box in which your *Musketeer Advantage* is shipped should contain the following items. When you first receive your *Musketeer Advantage*, please check that all of these items are in the box:

Part Description	Part Number
<i>Advantage</i> Control Box	
TS800 Slimline Coil	2021-0045
Or TS1000 Slimline Coil	2021-0046
Two-Piece Shaft Assembly	8012-0022
Black Armrest	8011-0002
Armrest Cover	8001-0013
Alkaline Battery Pack	0311-0021
Nylon Bolt 1.5" x 1/4" (1 off)	4001-0001
Nylon Bolt 2" x 1/4" (2 off)	4001-0003
Nylon Wing Nut 1/4" (3 off)	4002-0003
Teardrop Washer (4 off)	4005-0006
Velcro Tape - Felt	8507-0001
Velcro Tape - Hook	8507-0002
Warranty Card	5303-0001
This Instruction Manual	4901-0038

Accessories

To further enhance your *Advantage* and give you greater capacity and versatility, the following items are available for you to purchase:

Part Description	Part Number
• TS800 Slimline Coil	2021-0045
• TS1000 Slimline Coil	2021-0046
• Rechargeable NiMH Battery Pack	0311-0019
• Mains NiMH Charger	Region Specific*
• 12V NiMH Vehicle Battery Charger	0302-0038
• Control Box Hip Mount Bag	3001-0034
• RPG Headphones	4523-0018
• Blue Minelab Cap	5306-0013
• Blue Minelab Polo Shirt, Blue Minelab Jacket	Size Specific*

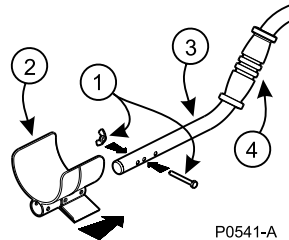
* Ask dealer for correct part number

Assembling Your Musketeer Advantage

Please follow these simple instructions to assemble your new *Musketeer Advantage*. Refer to the drawings to identify parts and how they are positioned. If you have any difficulties, please contact your dealer for further instructions.

Armrest / Upper Shaft Assembly

- Remove the black nylon bolt and wing nut (1) from the armrest (2).
- With the cup of the armrest positioned up (so that your arm rests in the cup and your hand comfortably grips the foam handgrip), slide the armrest (2) onto the end of the black upper shaft (3).
- Push the nylon bolt (1) through the holes and tighten the wing nut by hand.



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Figure 1 - Armrest Assembly

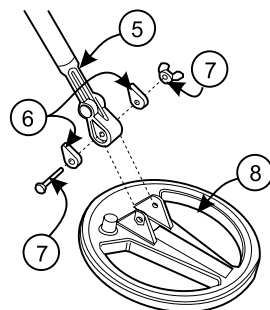
Lower Shaft Assembly

- Unscrew the wing nut and remove the bolt (7) that is through the lower fibreglass shaft (5). Ensure the washers do not fall out (6).
- Remove the wing nut, bolt (7) and washers from the coil (8). These are spare parts.
- With the teardrop washers in place, push the lower shaft (5) into the bracket on the coil so that the holes line up.

NOTE:

Ensure that the stainless steel spring clip located near the top of the fibreglass shaft is pointing toward the rear of the coil.

- Push the black nylon bolt (7) through the holes in the bracket on the coil from the cable entry side, then place the washer and wing nut on the other end of the bolt and tighten it by hand.



P0044-C

Figure 2 - The coil and lower shaft assembly

Completing the Shaft Assembly

- a) Slide the lower shaft assembly (5) into the upper shaft (3). Note that the black plastic locking nut (9) may need to be loosened to get the lower shaft assembly in place.
- b) Set the length of the shaft by locking the stainless steel spring clip into one of the holes provided, then tighten the plastic locking ring by hand.

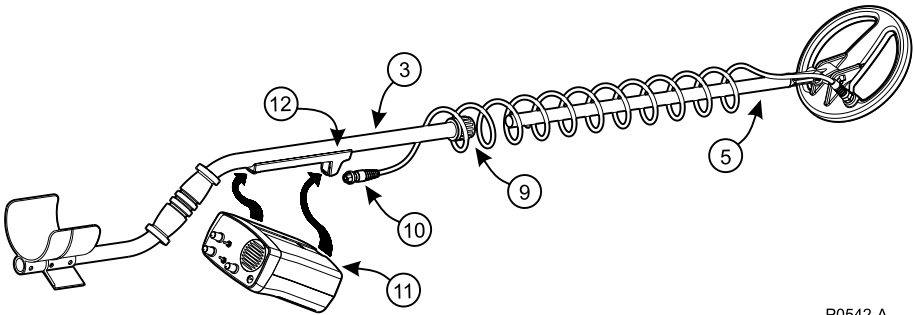


Figure 3 - Completing the shaft assembly

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Shaft Mount

- a) Position the control box so that the recess in the control box (11) is aligned with the leading edge of the mounting clip (12). Push the forward section of the control box upwards until the trigger “clicks” indicating the control box is secured.
- b) Firmly wind between 17 and 20 turns of the cable around the shaft until it reaches the control box.

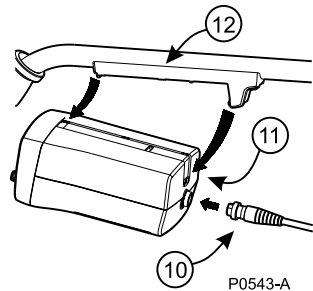


Figure 4 - Mounting the control box

P0543-A

NOTE:

Leave enough slack at the bottom of the cable near the coil to adjust the coil position without straining the coil cable.

- c) Connect the cable connector (10) to the plug on the rear of the control box.
- d) Use Velcro tabs to secure cable in the correct position on the shaft maintaining slack at coil and control box

Hipmount

Hipmounting is an alternative to mounting the detector on the shaft and it significantly reduces the strain on your arm, enabling you to search for longer periods of time without undue fatigue.

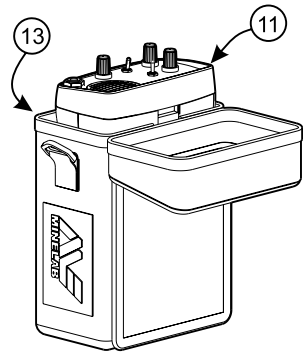
To hipmount the detector you will be required to purchase the hipmount bag from your dealer.

- a) Check that there are charged batteries in the control box (11).
- b) Put the control box into the hipmount bag (13) as shown in Fig 5
- c) Place the hipmount bag in your preferred working configuration. The hipmount bag can be worn on the belt, or over the shoulder.
- d) Wind about 5 turns of the cable around the shaft. This will reduce the amount of excess cable.

NOTE:

Leave enough slack at the bottom of the cable near the coil to adjust the coil position without straining the coil cable.

- e) Use Velcro tabs to secure the cable in position at the base of the shaft and where the cable leaves the shaft.
- f) Connect the cable connector to the rear of the control box.



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Figure 5 - Control box in hipmount bag

Batteries

Your *Musketeer Advantage* is supplied with a 12-volt battery pack to hold 8 “AA” alkaline batteries. If you have not already done so, you can purchase a rechargeable 12-volt NiMH battery pack, a mains charger and a car charger from your authorised Minelab dealer.

Installation of Alkaline Batteries

Ensure the detector is switched “Off” before opening the battery compartment.

- a) Remove battery pack from control box pulling back both release tabs on the battery pack housing.
- b) Slide open the lid on the battery pack.
- c) Place 8 “AA” alkaline batteries (14) into the base of the alkaline pack (15). Ensure they are aligned as shown in Fig 6 and as indicated inside the compartment.
- d) Slide the lid closed.
- e) Place the base of the battery pack at the rear of the battery compartment (A). Push the front edge of the battery pack firmly into position (B). The two battery clips will “click” into position to securely hold your battery pack in place (Fig 7).

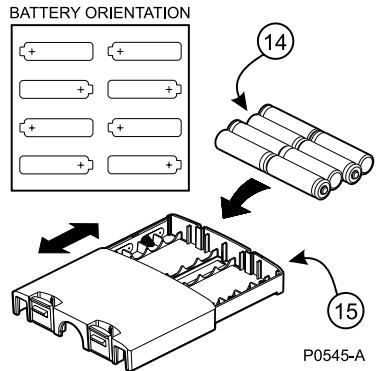


Figure 6 - Alkaline battery installation

CAUTION

High quality alkaline batteries should be used instead of standard carbon batteries as they will power your *Advantage* longer. The use of headphones will further extend battery life.

Installation of NiMH Battery Pack

- a) Ensure your NiMH pack is fully charged.
- b) Place the base of the battery pack at the rear of the battery compartment (A). Push the front edge of the battery pack into position (B). The two battery clips will “click” into position to hold the battery pack in place (Fig 7).

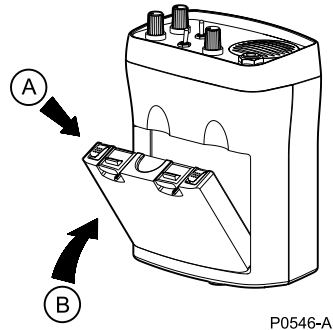


Figure 7 - Battery pack installation

NOTE:

The NiMH battery pack is factory sealed and does not open.

Low Battery Warning and NiMH Recharging

When the batteries are reaching the point at which they will no longer operate the *Advantage* will emit a distinct sharp “pip” from the speaker, approximately every 30 seconds. When this tone is heard, it is recommended that the NiMH battery pack be recharged or alkaline batteries be replaced as soon as possible to avoid missing any targets.

The NiMH battery pack can be recharged using either a mains powered charger or a 12V charger that can be plugged into the cigarette lighter of your vehicle. These accessories are available from your authorised Minelab dealer.

CAUTION

Check the mains charger voltage. Only use the appropriate mains charger for the country you are in.

Using Your NiMH Chargers

- a) Plug the charger into the socket on the rechargeable battery pack.
- b) Plug the charger into the power source and switch on.
- c) A red light will appear on the charger, indicating that it has power (car charger only).
- d) A green light will appear on the battery pack during charging.
- e) A completely flat battery pack will take approximately 12 - 14 hours to fully charge.
- f) The green light on the battery pack will extinguish once it is fully charged.
- g) A fully charged NiMH pack will give between 15 and 20 hours detecting time, depending on the number of targets found.

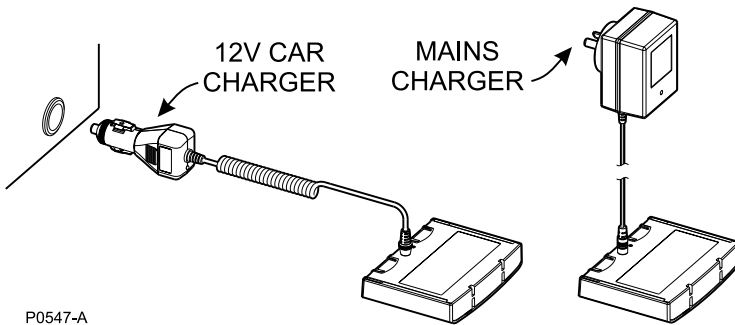
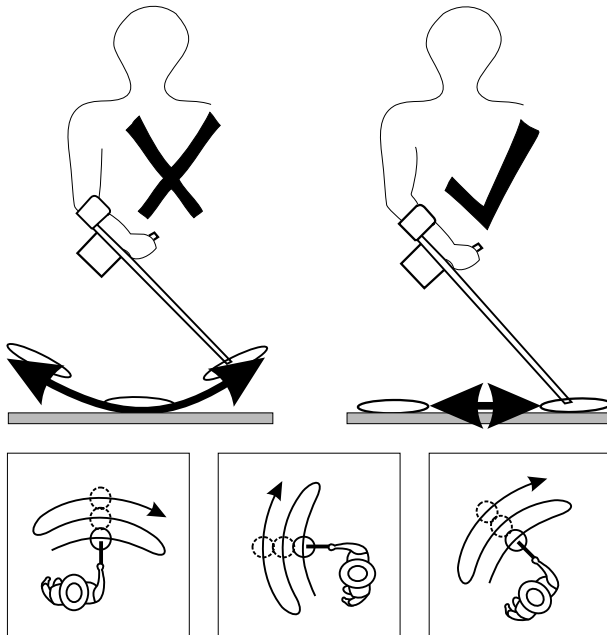


Figure 8 - Car & mains battery chargers

Treasure Hunting Tips

Your *Musketeer Advantage* detector will perform at its best when the coil is kept in contact with the ground. If you are not yet an experienced operator, you should practice maintaining a constant coil height at the extremity of each swing; maintaining contact with the ground will make this easier. This is important as variation in coil height at the end of each swing can cause confusing sounds and will reduce detection depth.



P0188-A

Figure 12 - Sweeping the Coil

NOTE:

Each sweep of the coil should overlap the previous one by 25%. This will ensure good ground coverage.

Keeping the coil in contact with the ground will increase detection depth and response to small objects.

Environmental Concerns

Firstly, it should be pointed out that treasure hunting with a metal detector is the most environmentally friendly way to recover coins, rings and other treasure items. However, it is important to leave an area that you have searched in the same condition as you found it.

All holes that have been dug must be properly refilled. Not only is it environmentally unacceptable to not fill in your holes, it is also very dangerous. There are special tools to enable you to recover targets easily from grassed areas without digging large holes; talk to your detector shop or club for the preferred method of digging up your target.

Take away and properly dispose of any junk that you find or produce, such as nails, tin cans, or flat batteries. Leaving an area “scarred” can result in action being taken to prevent the use of metal detectors, which spoils this fascinating hobby for others as well as yourself.

Detector Care

The *Advantage* is a high-quality electronic instrument, finely engineered and packaged in a durable housing. Taking proper care of it is mostly common sense.

- **Do not leave batteries in the control box when the detector is not in use for a period exceeding two weeks.** Damage caused by leaking batteries would be severe and would void the warranty.
- **Batteries.** Flat or faulty batteries cause many detector problems. Ensure that you use only quality alkaline batteries and that they are replaced when the warning signal indicated through the headphones or speaker is heard.
- If temperatures are very high, **do not leave the detector in direct sunlight for longer than necessary.** Covering it when not in use will help protect it. Try to avoid leaving it in a closed trunk or in a car sitting in sunlight.
- While the control box has been designed to be water-resistant, it is not waterproof. Avoid wetting it unnecessarily. Use the hipmount bag to prevent water and dust ingress. **Never allow the box to come into contact with gasoline or other oil-based liquids.**
- **Keep the unit clean and dry** and avoid getting sand and grit into the shafts or the tightening nuts. Do not use solvents to clean the detector. Use a damp cloth with mild soap detergent.
- **Cables.** Ensure the coil cable is in good condition and not subject to undue stress.

Trouble-shooting Guide

Fault	Solution
No Sound	Ensure the unit is turned “On” Check battery orientation and battery connections Ensure battery pack is correctly fitted Check headphones and their connection
Erratic Noises	Check battery charge and battery connections Ensure coil plug is tightened firmly Reduce the sensitivity by turning counter-clockwise Switch out of “Fix” ground balance position Check and adjust the ground balance Check headphones and their connection and lead Check for sand or grit between coil cover and coil
No Target Response	Ensure unit is turned “On” Check battery charge and battery connections Check coil connection Check headphones and their connection

In the unfortunate circumstance that you need to return your detector to Minelab for service, please fill out the Minelab Service Repair Form on page 27 and enclose it with the detector. Please supply as much detail as possible about the fault as this will assist our service engineers to rectify the problem quickly and efficiently.

Specifications

These specifications are subject to change without notice.

Length	Extended	53" (1350 mm)
	Unextended	47" (1190 mm)
Weight	Control Box (excl. Batteries)	530 g
	TS800 Slimline Coil	500 g
	TS1000 Slimline Coil	650 g
Batteries	Alkaline Cells	Eight 1.5V "AA"*
	NiMH Battery Pack	12V, 1000 mAh
Coil Options	TS800 Slimline "Double D" waterproof TS1000 Slimline "Double D" waterproof	
Headphones	Impedance	8 - 32 ohms
	Jack – Stereo / Mono	¼"
Frequency	Transmission, sinewave	5 kHz
Ground Rejection	Fixed	
	Manual Ground Adjust	Pot 1 turn
Search Modes	Discriminate, All Metals / Ground Adjust Enable, All Metals / Pinpoint	
Controls	On / Off, Sensitivity	Pot and switch
	Ground Adjust	Pot and switch
	Discriminate Level Adjust	Pot 1 turn
	All Metals / Discriminate	Switch 2 Pos.
	Pinpoint	Switch 3 Pos.
Warranty	Control Box	2 years
	Coil	1 year
Patents	AUS 595835, others pending.	

* Not included

Warranty and Service

Minelab Electronics Pty Ltd warrants (subject to certain conditions) that its products are free from defect in materials and workmanship.

Minelab Electronics Pty Ltd also warrants that this product is fit for the purpose it is designed for as stated in this manual.

See Warranty Card for clauses and conditions.

Minelab Service Repair Form

Today's Date:

Detector Model: Serial No.:

Purchased From:

Purchase Date:

Part(s) Supplied for Service:

.....

Description of Fault:

.....

.....

.....

.....

Owner's Name:

Address:

.....

Phone: Day () Home ()

Fax: () Email: