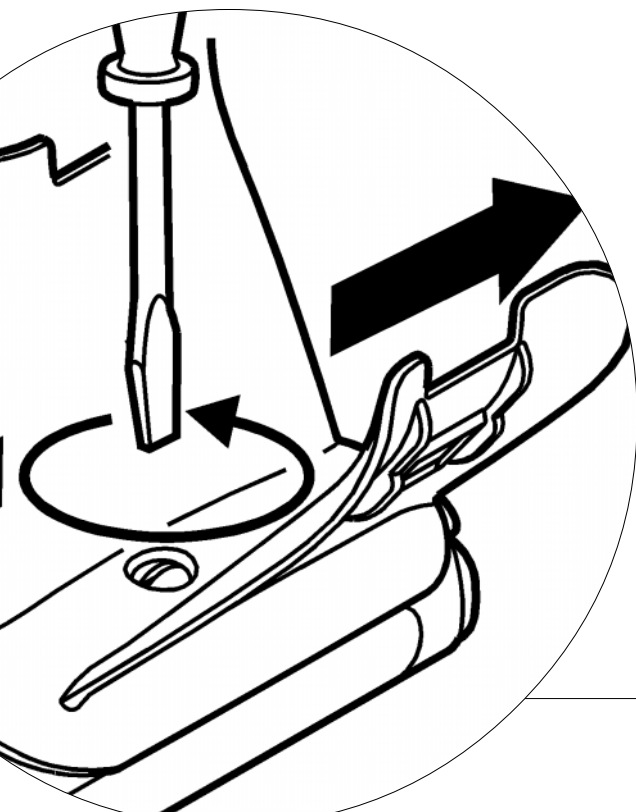




2

Assembly

This chapter provides details and instructions on assembling and adjusting the Explorer.

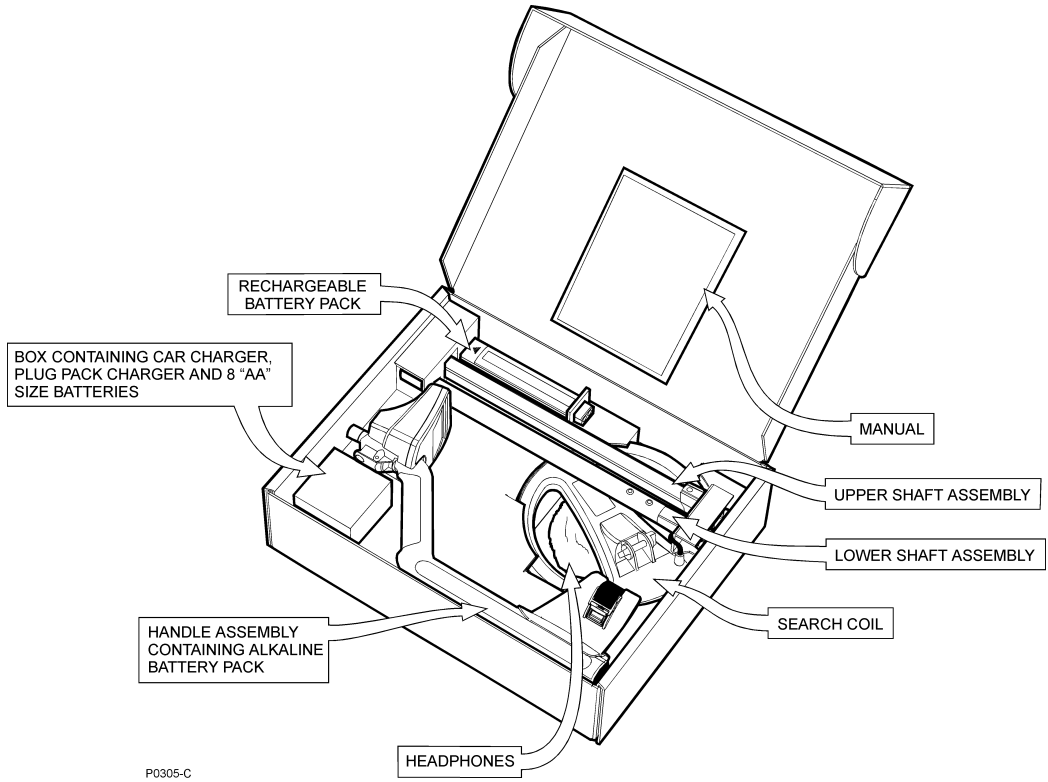


UNPACKING YOUR EXPLORER

easy reference

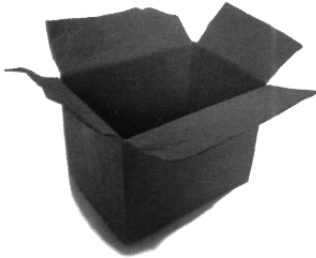
2

ASSEMBLY





UNPACKING YOUR EXPLORER



List of Parts

The box in which the Explorer is shipped should contain the items illustrated on the facing page. Please check that all of these items are in the box. If any of these components are missing, contact your Minelab retailer immediately.

NOTE The Explorer S model does not have the NiMH battery and chargers supplied. These are available as accessories from your Minelab dealer.

Accessories

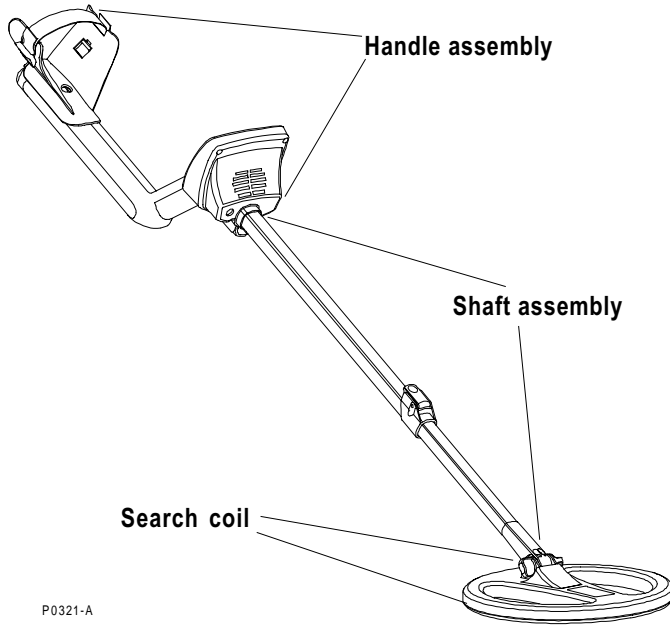
The following items are available for purchase separately.

- NiMH battery pack (spare)
- Coil stand
- Spare coil skid plates
- Carry bag
- Minelab Cap, Minelab Poloshirt

For further information on these and other Minelab products contact your Minelab dealer.

You can also visit us on the web: <http://www.minelab.com.au>

ASSEMBLING THE DETECTOR



P0321-A

Please follow these instructions to assemble the Explorer. Refer to the drawings to identify parts and how they are positioned.

The detector's components are organised into three categories:

- **the search coil;**
- **the shaft assembly** comprised of the upper shaft and lower shaft;
- **the handle assembly** comprised of the handle, armrest and control box.

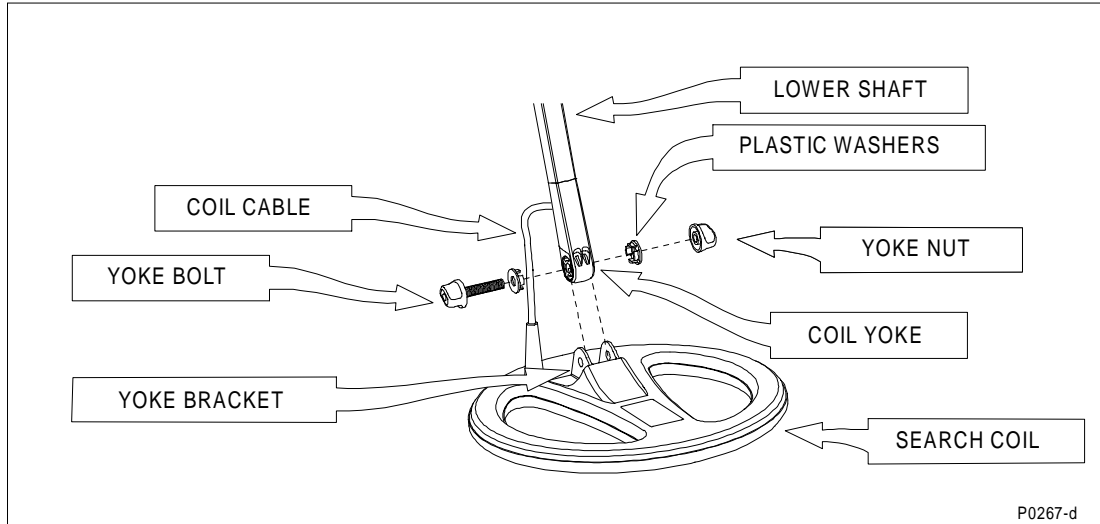
NOTE To avoid difficulties or damage to the detector's electronic components, it is strongly recommended you follow the sequence of instructions for assembly.

Please contact your Minelab dealer for further instructions should any difficulties arise.



CONNECTING THE SEARCH COIL

The search coil transmits electromagnetic signals into the ground and receives the response.



P0267-d

Figure 2.1 Connecting the search coil to the lower shaft

Connecting the search coil to the lower shaft

Figure 2.1

CAUTION DO NOT attempt to disconnect the coil cable where it enters the search coil itself. They are shipped pre-assembled and any attempt to disconnect will void your detector warranty.

To attach the search coil to the lower shaft:

- STEP 1 Place the search coil on a flat surface close to the coil yoke.
- STEP 2 (Figure 2.2, following page) Plug the two black plastic washers into the recesses provided either side of the coil yoke.

(Continued next page)

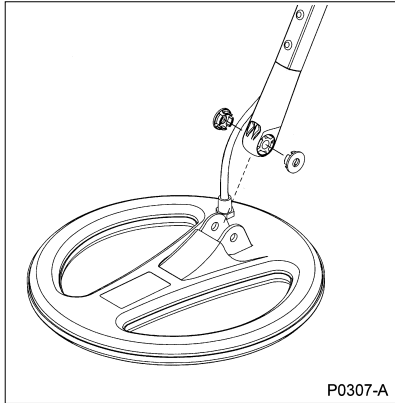


Figure 2.2 Inserting coil yoke into bracket.

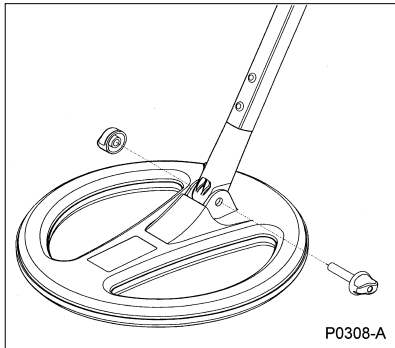


Figure 2.3 Securing yoke to search coil.

Connecting the search coil to the lower shaft

Figure 2.1, 2.2, 2.3 (Continued from previous page)

- STEP 3** Check the orientation of the search coil and shaft ensuring that the coil cable runs along the underside of the shaft (note rivets on top).
- STEP 4** (See Figure 2.2). To join the shaft to the search coil, slide the yoke into the yoke bracket on top of the coil.
- STEP 5** (See Figure 2.3) Insert yoke bolt through the search coil's yoke bracket and the coil yoke. Fasten with the yoke nut provided, being careful not to damage the thread of the nuts by over-tightening. This may need to be loosened to adjust coil to a comfortable detecting angle.

You are now ready to proceed to the shaft assembly.



THE SHAFT ASSEMBLY

The shaft assembly is comprised of the upper and lower shafts connected by the shaft cam lock. The assembly houses the coil cable and connects the search coil to the handle assembly. These instructions assume that the search coil is connected to the lower shaft.

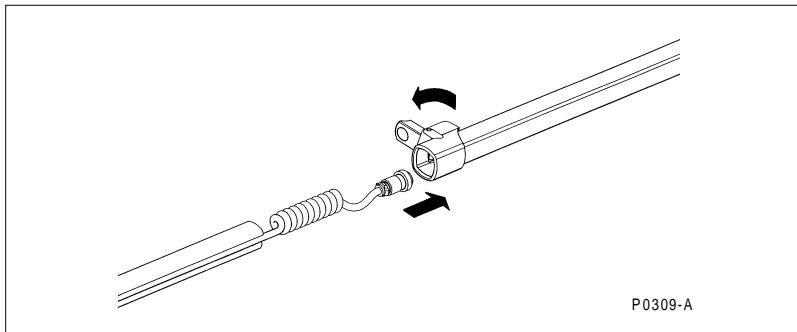


Figure 2.4 Feeding coil cable into upper shaft.

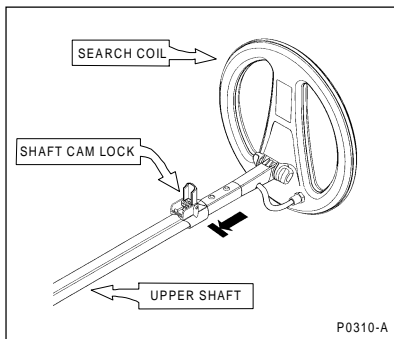


Figure 2.5 Sliding lower shaft into upper shaft

Shaft assembly

Figure 2.4, 2.5

NOTE Orientation: coil cable is on bottom of lower shaft.

To assemble the lower and upper shaft:

CAUTION Lift the shaft cam lock lever before inserting the lower shaft.

STEP 1 (Figure 2.4) Feed the coil cable which is attached to the lower shaft through the inside of the upper shaft.

STEP 2 (Figure 2.5) Slide the lower shaft entirely into the upper shaft until the cam lock rests against the uppermost shaft rivet.

STEP 3 Pull the coil cable's metal connector through the open end of the upper shaft until it 'dangles' from the opening.

You are now ready to connect the shaft assembly to the handle assembly.

CONNECTING THE SHAFT ASSEMBLY

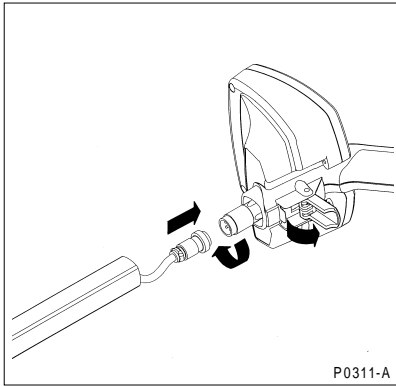


Figure 2.6. Attaching coil cable to control box

Connecting the shaft assembly to the handle assembly

Figure 2.6–2.9

NOTE Shaft orientation: coil cable is on bottom of lower shaft, and cam lock is on top of upper shaft.

To connect the shaft assembly to the handle assembly:

- STEP 1 (Figure 2.6) Lift the control box cam lock lever to the open position.
- STEP 2 (Figure 2.6) Align the connections and screw coil cable connector to the socket underneath the handle assembly control box. Ensure the connector's threaded bracelet is firmly secured.
- STEP 3 (Figure 2.7) To prevent the coil cable from 'bunching', extend the lower shaft from the upper shaft by approximately 15cm (6 inches).
- STEP 4 (Figure 2.8) Making sure that the control box cam lock lever is in the open position, push the upper shaft firmly into the control box until you feel it reach the back of the control box.

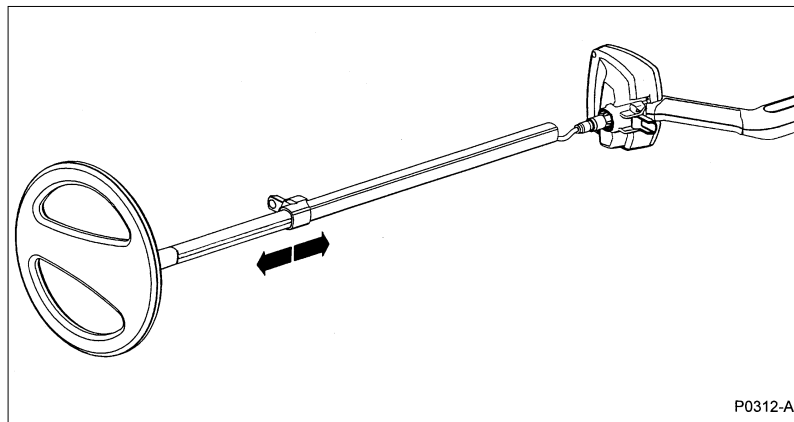


Figure 2.7. Preventing the coil cable 'bunching'

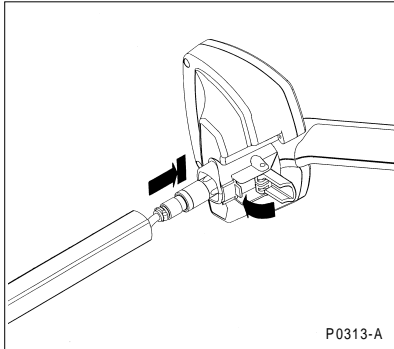


Figure 2.8 Inserting shaft assembly into control box

STEP 5 Secure upper shaft in position by moving the control box cam lock to the closed position.

STEP 6 (Figure 2.9) Adjust shaft to the desired length and then secure with shaft cam lock lever.

STEP 7 (Figure 2.9) Tilt the search coil to the most comfortable angle, keeping in mind it will need to be parallel to the ground during detecting.

NOTE To avoid difficulty securing the control box camlock lever, ensure the *shaft* camlock is released to allow greater shaft movement.

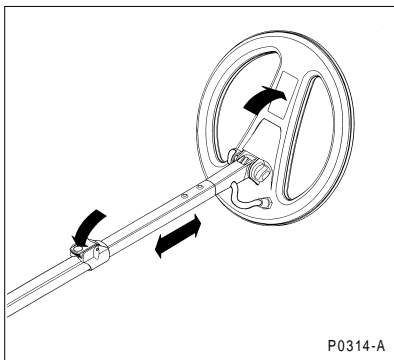


Figure 2.9 Adjusting the shaft and angle of the search coil

You are now ready to proceed to the handle assembly.

Coil not connected?



These instructions require the search coil to be connected to the lower shaft. For directions on this procedure, refer to page 13.

THE HANDLE ASSEMBLY

The handle assembly is comprised of the armrest, straps and the control box. It is connected to the shaft assembly by the control box cam lock.

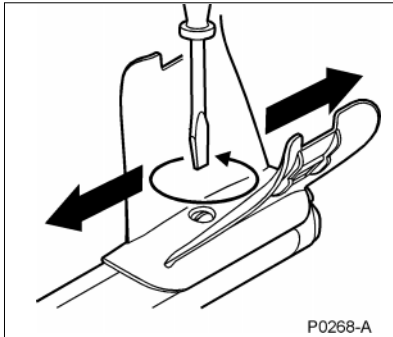


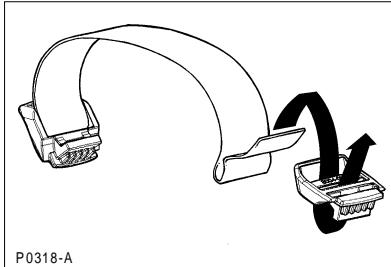
Figure 2.10 Armrest adjustment

Adjusting the armrest assembly

Figure 2.10

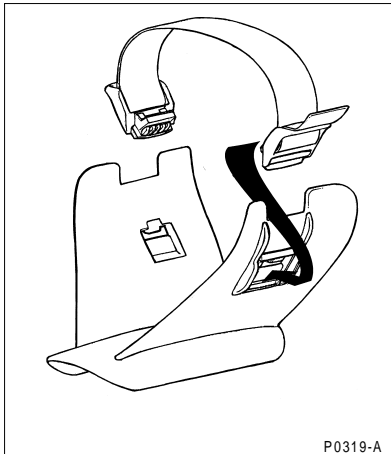
To adjust armrest:

- STEP 1 Loosen the screw in the centre of the armrest (turn counter-clockwise). Use a screwdriver or the edge of a coin.
- STEP 2 Slide armrest to your desired position. Your hand should comfortably grip the angled neck of the handle assembly with the detector feeling like an extension of your forearm.
- STEP 3 Gently remove your arm.
- STEP 4 Tighten screw (clockwise) to lock into position.



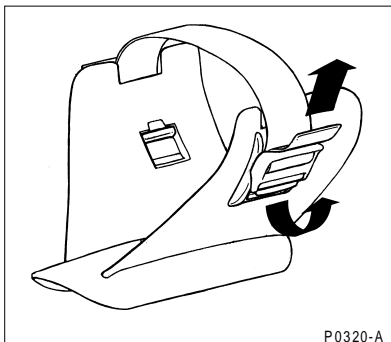
P0318-A

Figure 2.11 Fitting buckle to armrest strap



P0319-A

Figure 2.12 Fitting armrest strap to armrest



P0320-A

Figure 2.13 Tightening armrest strap

Fitting the armrest strap

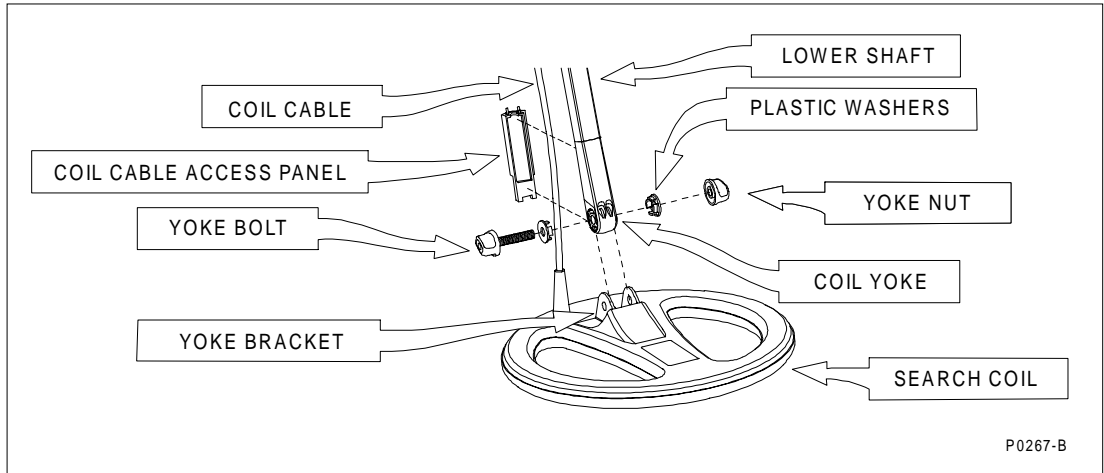
Figure 2.11–2.13

To fit and adjust the armrest strap:

- STEP 1** (Figure 2.11) Thread the strap through the buckle openings as illustrated.
- STEP 2** (Figure 2.12) Clip both buckles into the openings at either outer side of the armrest. Arrange it so that the adjustable buckle is on the side according to left or right-handed preference.
- STEP 3** Test by sliding your arm underneath strap and resting your forearm on the armrest (which should be adjusted to a comfortable setting).
- STEP 4** (Figure 2.13) Tighten strap by pulling up (in the direction of the top arrow). Loosen strap by tilting the edge of the buckle outwards to release buckle from armrest.

Your armrest should now be adjusted to your satisfaction. Next time you use your detector, all you will need to do is click the buckle back into the armrest.

REPLACING AND FITTING COMPONENTS



P0267-B

Figure 2.14 Replacing the search coil

Replacing the search coil

Figure 2.14–2.17

CAUTION DO NOT attempt to remove the coil cable from the search coil. Any attempt to disconnect will void your detector warranty.

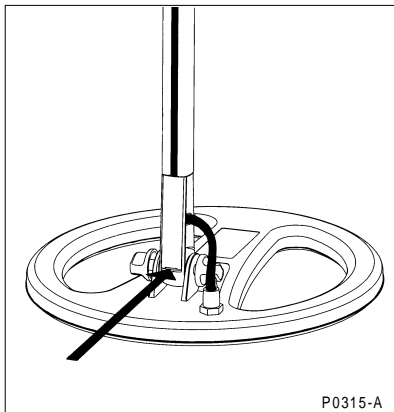
To replace the search coil:

STEP 1 Disconnect the shaft assembly from handle assembly by reversing the procedure outlined in **Connecting the shaft assembly to handle assembly** on page 16.

CAUTION DO NOT attempt to remove the shaft assembly without disconnecting the coil cable.

STEP 2 Separate the two shaft assemblies by releasing the shaft cam lock and sliding the lower shaft out.

STEP 4 (See Figure 2.15) Locate the screwdriver slot at the rear of the coil yoke and prise off the coil cable access panel. You may need to tilt the coil up to gain access to the slot.



P0315-A

Figure 2.15 Prising off coil yoke cover

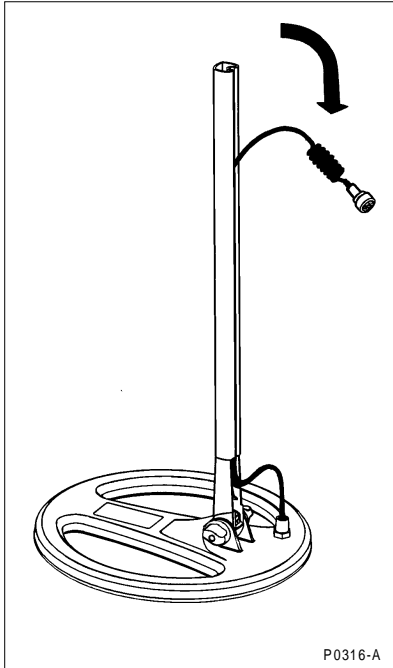


Figure 2.16 Removing the coil cable

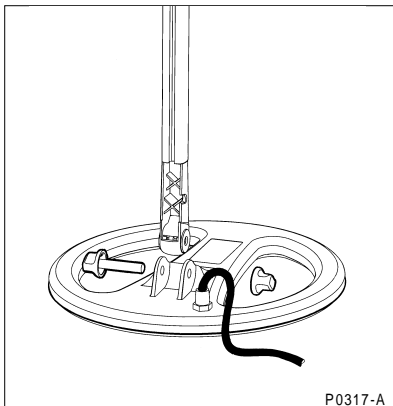


Figure 2.17 Removing yoke from search coil.

- STEP 3** (See Figure 2.16) Gently pull the coil cable from the channel underneath the lower shaft.
- STEP 5** (See Figure 2.17) Loosen the yoke nut and carefully remove bolt from the yoke bracket. This removes the yoke from the search coil. Be careful not to lose the two plastic washers.
- STEP 6** Replace the search coil. Be careful not to damage the thread of the nut by over-tightening.
- STEP 7** (See Figure 2.16). Starting at the top of the lower shaft, carefully feed the coil cable back into the groove at the rear of the lower shaft. Once this is completed you should be able to see approximately six inches (150mm) of cable between the coil yoke and the search coil. This is the slack necessary to allow adjustment to the angle of the search coil.
- STEP 8** **To replace the coil cable access panel:** ensure that the coil cable aligns with the semicircular hole at the side of the coil yoke and gently ease the coil cable access panel into the top of the recess until its prongs are well within the recess. Check again to ensure that the cable is snugly lodged in the semicircular hole.
- STEP 9** (See detail in Figure 2.15). Using a screwdriver in the slot, prise the panel back flush into place.
- STEP 10** Reconnect cable to control box (as directed in **Connecting the shaft assembly to the handle assembly**, page 16).
- NOTE** If you have difficulty retrieving coil cable from within shaft assembly it will be necessary to shorten the overall shaft length to allow the necessary slack.

HEADPHONES

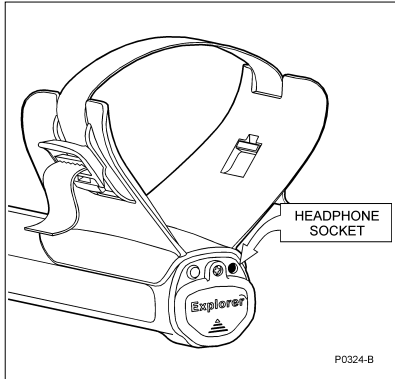


Figure 2.18 Inserting headphone jack

Attaching headphones

Figure 2.18

The use of headphones when treasure hunting with the Explorer will avoid disturbing others in the area. The reduced power demands of the headphones will extend the detector's battery life.

The socket for the headphone plug is located above the rubber seal at the top of the handle assembly. The headphones may be plugged into this socket or unplugged at any stage of operation.

Congratulations! Your Explorer is now assembled. You are now ready to proceed to the Chapter 3: Batteries.

