



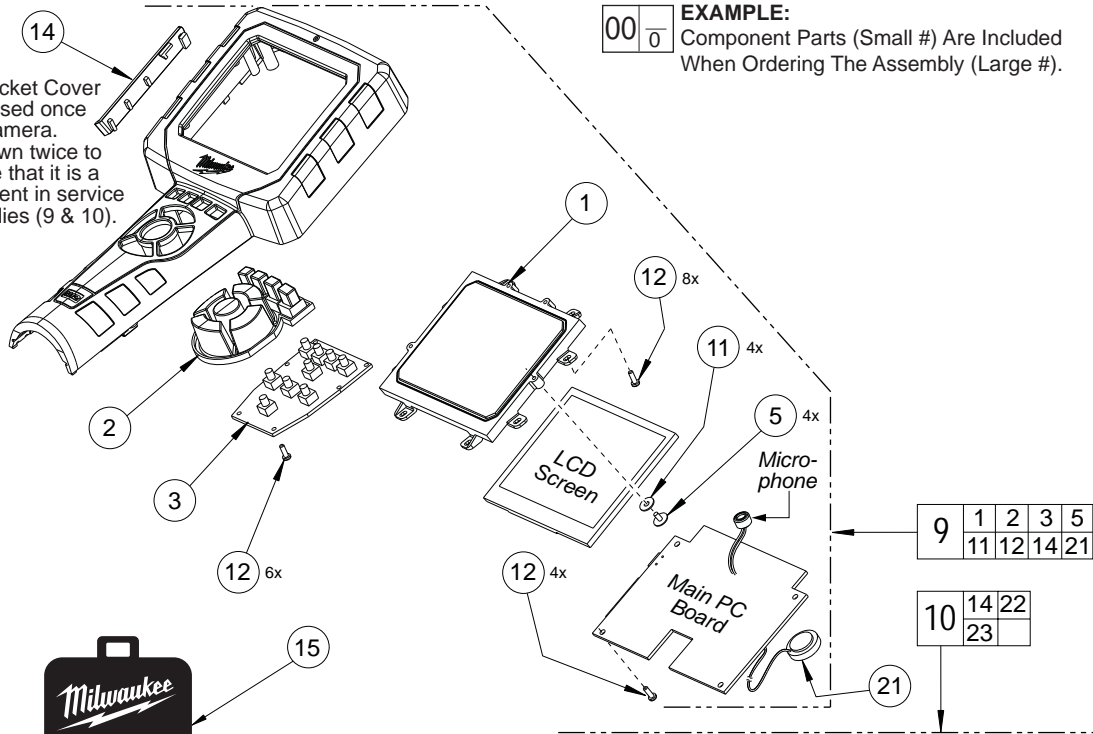
SERVICE PARTS LIST

BULLETIN NO.
54-07-2320

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS			REVISED BULLETIN	DATE
12 VOLT M-SPECTOR 2 (Digital Inspection Camera)				July 2009
CATALOG NO.	2311-20	SERIAL NUMBER	WIRING INSTRUCTION	
		C20A		

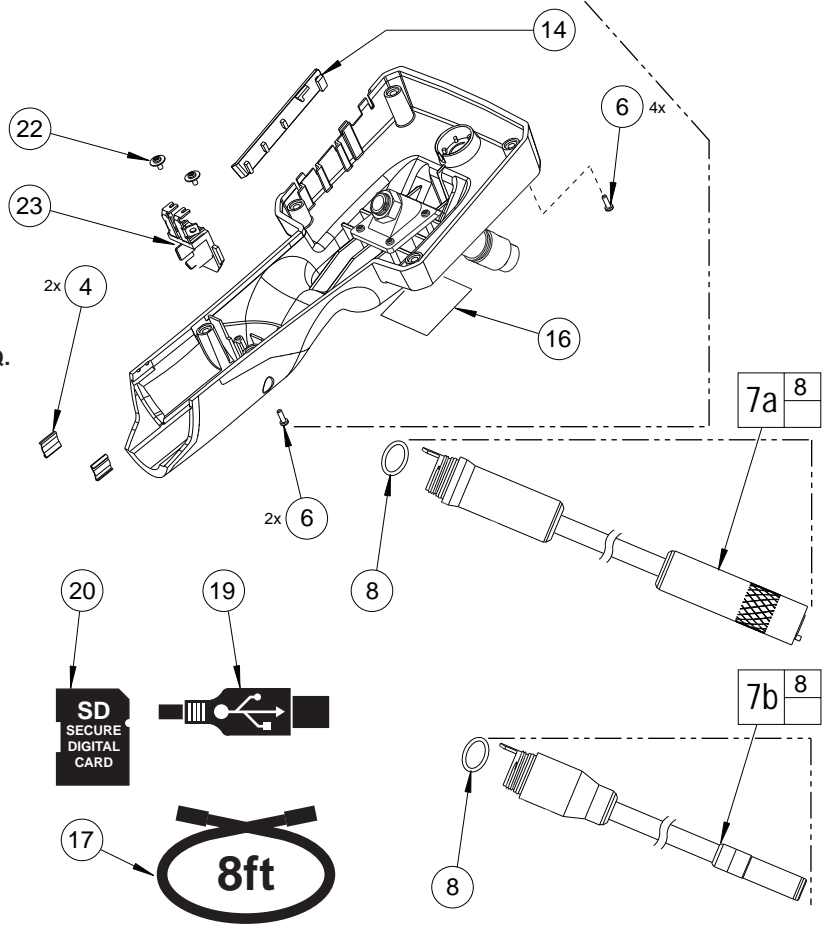
NOTE:
USB Socket Cover (14) is used once in the camera.
It is shown twice to illustrate that it is a component in service assemblies (9 & 10).

EXAMPLE:
Component Parts (Small #) Are Included When Ordering The Assembly (Large #).



2311-20: Base model for 2311-21, 2312-21 and 2313-21.
 * Standard equipment with Models 2311-21 & 2313-21.
 ** Standard equipment with Models 2312-21 & 2313-21.

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	44-06-0150	LCD Lens	(1)
2	42-42-0370	Rubber Button	(1)
3	22-09-1560	PCB - Switch	(1)
4	42-70-0180	Clip	(2)
5	05-78-0840	M2 x 4 Washer Hd Self-Tapping Scr	(4)
6	05-78-0850	M2.6 x 10 Self-Tapping Screw	(6)
7a	48-53-0125	Digital Camera Cable *	(1)
7b	48-53-0130	Analog Camera Cable **	(1)
8	34-40-0195	O-Ring	(1)
9	14-46-1730	12 V Top Housing Kit	(1)
10	14-46-1735	12 V Bottom Housing Kit	(1)
11	45-88-1685	LCD Cushion Washer	(4)
12	05-78-0085	M2 x 6 Self-Tapping Screw	(18)
14	31-15-0780	USB Socket Cover	(1)
15	42-55-2311	Carrying Case	(1)
16	12-20-2120	Service Nameplate	(1)
17	48-53-0140	Accessory 8' Extension Cable	(1)
19	42-44-0200	USB (Universal Serial Bus) Cable	(1)
20	22-74-3000	SD (Secure Digital) Card	(1)
21	23-45-0025	Speaker with Leads	(1)
22	-----	M2 x 6 Washer Hd Self-Tapping Screw	(2)
23	-----	Battery Connector Block	(1)



SEE BACK PAGE FOR IMPORTANT SERVICE NOTES!

SERVICE NOTES:

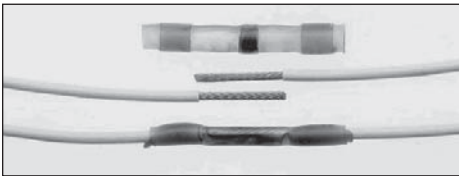
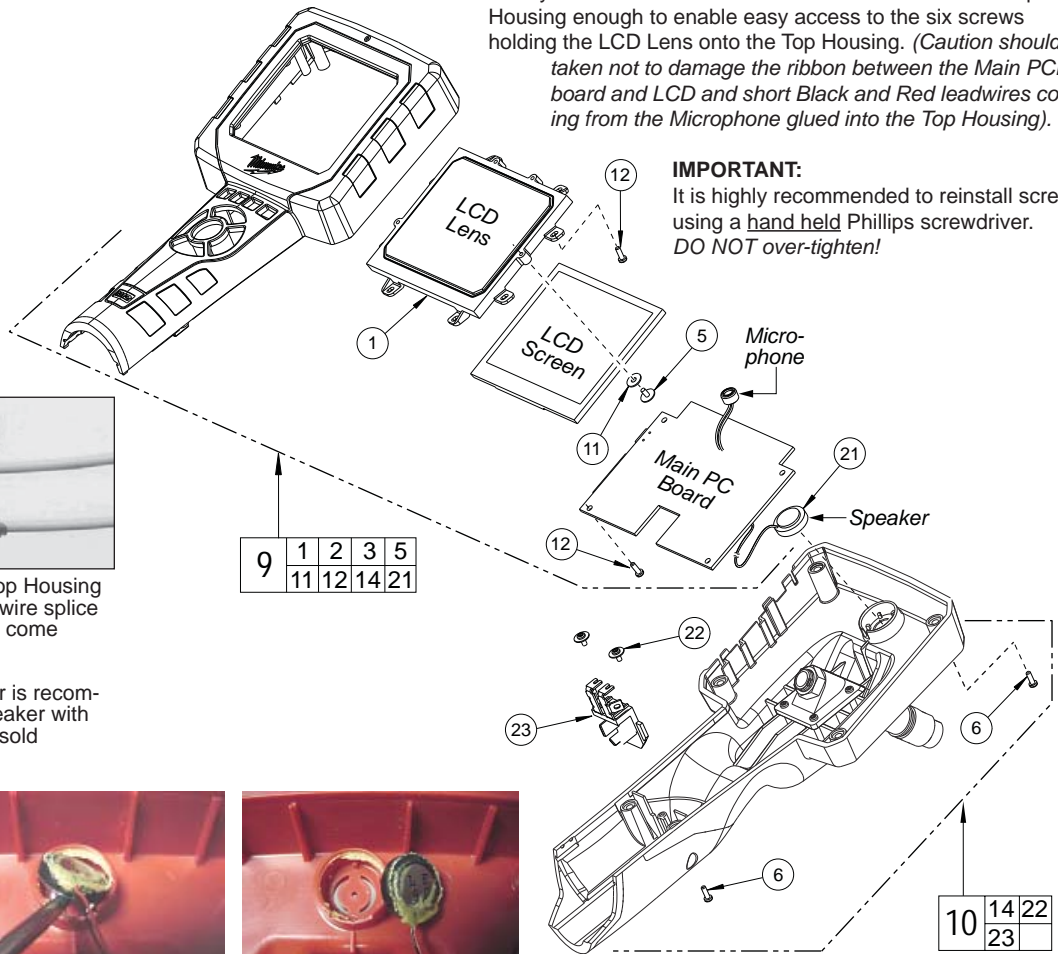
1. When changing top housing assembly [9] de-solder Red & Black leadwires from battery connector block. Do not remove wires from PC Board.

2. When changing LCD Lens [1] do the following:

- Unplug five pin connector from Main PCB board.
- Remove four Screws [12] from Main PCB board.
- Gently lift / move Main PCB board around enough to remove Screws [5] and Washers [11].
- Gently lift LCD Screen and Main PCB board out of the Top Housing enough to enable easy access to the six screws holding the LCD Lens onto the Top Housing. (*Caution should be taken not to damage the ribbon between the Main PCB board and LCD and short Black and Red leadwires coming from the Microphone glued into the Top Housing*).

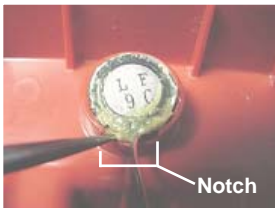
IMPORTANT:

It is highly recommended to reinstall screws using a hand held Phillips screwdriver. **DO NOT over-tighten!**

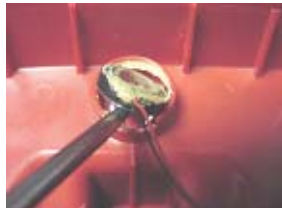


If, ordering and installing a 12 Volt Top Housing Kit [9] 14-46-1730, no solder sleeve wire splice connector is required. A Speaker will come properly attached to the Main PCB.

A solder sleeve wire splice connector is recommended only when installing the Speaker with Leads [21] 23-45-0025, service part sold individually.



To remove old Speaker, locate notch in Bottom Housing.



Place a small blade or pin at the base of notch on either side of the red/black wires and carefully pry upward.



To install Speaker, remove any old adhesive residue from the speaker cavity area. Place Speaker in cavity with red/black wires positioned in the notch. Apply a small amount of 3M Scotch-Grip™ Rubber & Gasket Adhesive 1300 on the cavity edge over the Speaker to secure. **DO NOT put adhesive in the bottom of the cavity!**

10	14	22
	23	