

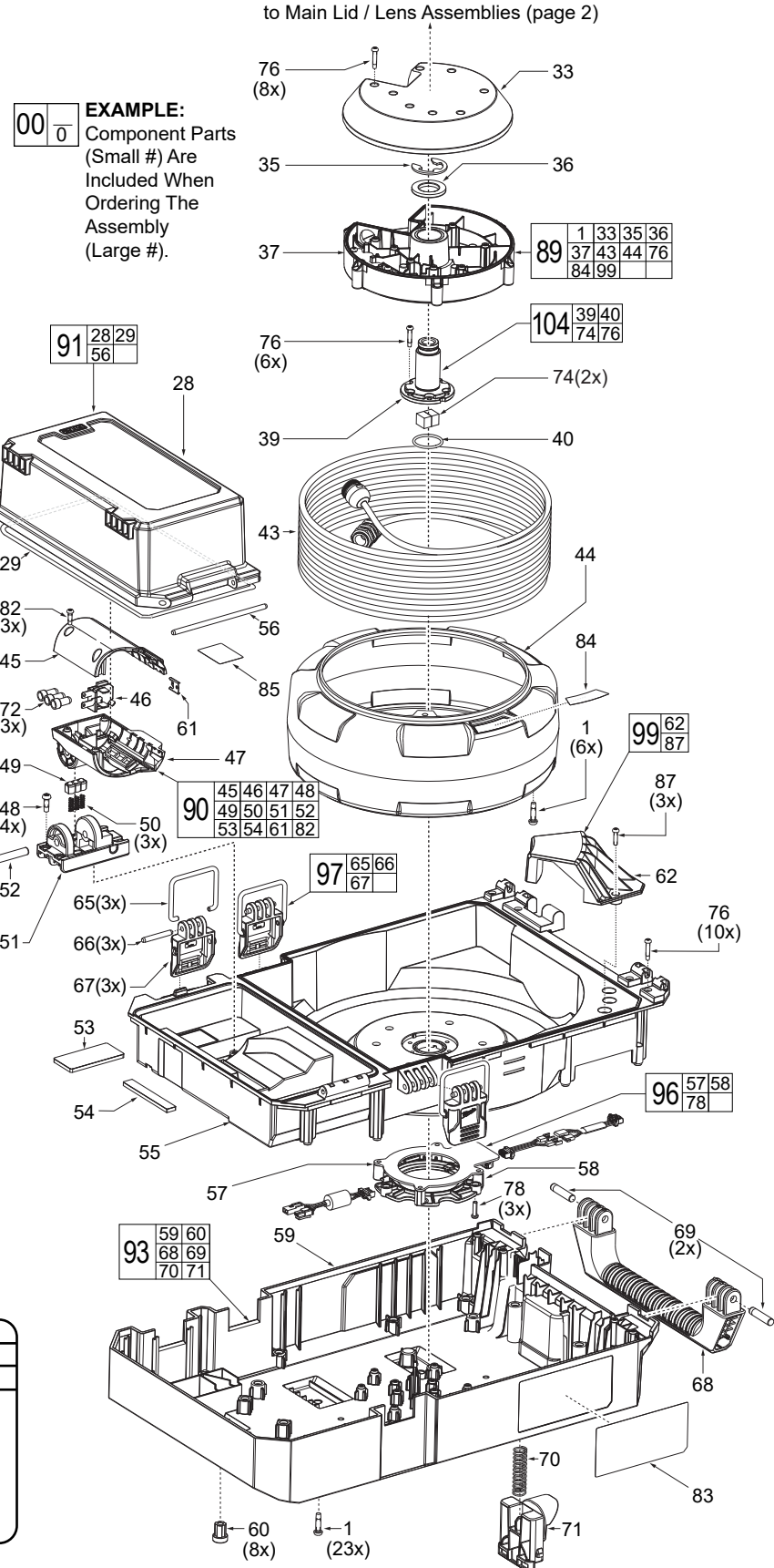


# SERVICE PARTS LIST

**BULLETIN NO.**  
**PN0000859**

|   |                |                   |  |
|---|----------------|-------------------|--|
| <b>SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS</b> |                | REVISED BULLETIN  | DATE   |
| <b>M12™ 75' Drain Camera</b>                                  |                |                   | Oct. 2025                                      |
| <b>CATALOG NO.</b>  | <b>3154-20</b> | <b>SERIAL NO.</b> | <b>P01A</b>                                    |
|   |                |                   | <b>WIRING INSTRUCTION</b><br><b>See Page 3</b> |

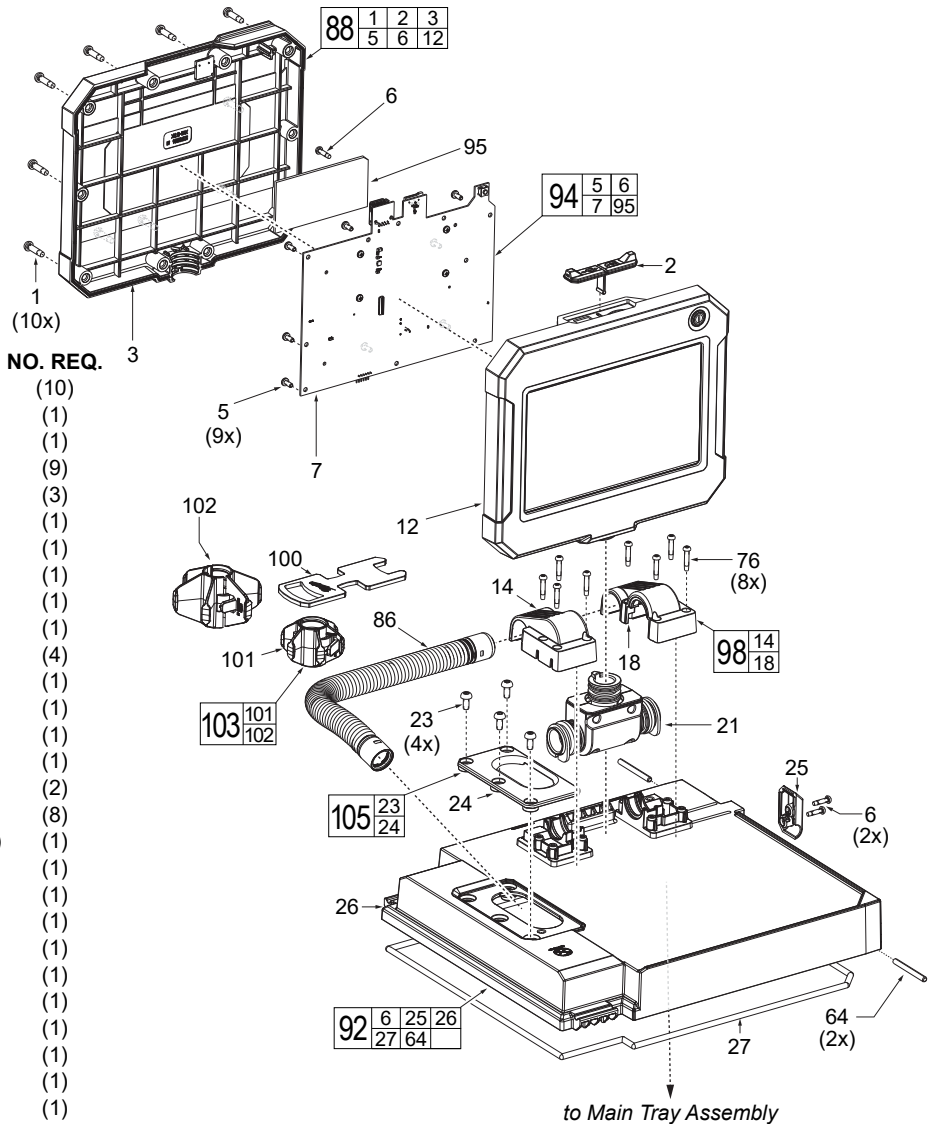
| FIG. | PART NO.   | DESCRIPTION OF PART           | NO. REQ. |
|------|------------|-------------------------------|----------|
| 1    | 06-82-4003 | M4 x 16mm Pan Hd. T-20 Screw  | (29)     |
| 28   | -----      | Battery Housing (Back)        | (1)      |
| 29   | -----      | Sealing Tray Gasket           | (1)      |
| 33   | -----      | Shaft Cap (Top)               | (1)      |
| 35   | -----      | E-Ring                        | (1)      |
| 36   | -----      | Flat Washer                   | (1)      |
| 37   | -----      | Shaft Cap (Bottom)            | (1)      |
| 39   | -----      | Drum Shaft                    | (1)      |
| 40   | -----      | O-Ring                        | (1)      |
| 43   | -----      | Pushrod Cable Assembly        | (1)      |
| 44   | -----      | Drum Housing                  | (1)      |
| 45   | -----      | Battery Cover (Right)         | (1)      |
| 46   | -----      | Terminal Block Assembly       | (1)      |
| 47   | -----      | Battery Cover (Left)          | (1)      |
| 48   | 06-82-0032 | M4 x 12mm Pan Hd. T-20 Screw  | (4)      |
| 49   | -----      | Positioning Column            | (1)      |
| 50   | -----      | Battery Spring                | (3)      |
| 51   | -----      | Battery Holder                | (1)      |
| 52   | -----      | Battery Rotate Pin            | (1)      |
| 53   | -----      | Rubber Pad (Large)            | (1)      |
| 54   | -----      | Rubber Pad (Small)            | (1)      |
| 55   | -----      | Main Tray Assembly            | (1)      |
| 56   | -----      | Battery Door Pin              | (1)      |
| 57   | -----      | Counter Board                 | (1)      |
| 58   | -----      | PCBA Holder                   | (1)      |
| 59   | -----      | Main Housing                  | (1)      |
| 60   | 45-60-0100 | Rubber Feet                   | (8)      |
| 61   | -----      | M12 Battery Housing Clip      | (1)      |
| 62   | -----      | Cable Hold Down               | (1)      |
| 65   | -----      | Battery Door Buckle           | (3)      |
| 66   | -----      | Latch Pin                     | (3)      |
| 67   | -----      | Battery Door Latch            | (3)      |
| 68   | -----      | Handle                        | (1)      |
| 69   | -----      | Handle Pin                    | (2)      |
| 70   | -----      | Locker Spring                 | (1)      |
| 71   | -----      | Locker                        | (1)      |
| 72   | -----      | Closed-End Terminal           | (3)      |
| 74   | -----      | Foam Speaker Pad              | (2)      |
| 76   | 06-82-0226 | M3 x 16mm Pan Hd. T-10 Screw  | (24)     |
| 78   | 06-82-1439 | M3 x 12mm T-10 Screw          | (3)      |
| 82   | 05-81-0005 | M3 x 11mm T-10 Taptite Screw  | (3)      |
| 83   | 12-20-0554 | Service Nameplate             | (1)      |
| 84   | -----      | Logo Label                    | (1)      |
| 85   | 10-15-9731 | Tool ID Label                 | (1)      |
| 87   | 05-74-0501 | M3 x 12mm T-10 Pan Hd. Screw  | (3)      |
| 89   | 48-53-3154 | Cable Assembly w/Drum Housing | (1)      |
| 90   | 23-74-3154 | Battery Terminal Kit          | (1)      |
| 91   | 14-46-0823 | Battery Lid Kit               | (1)      |
| 93   | 14-46-0821 | Bottom Housing Kit            | (1)      |
| 96   | 14-20-0342 | Counter PCBA w/ Hold Down     | (1)      |
| 97   | 14-46-0824 | Latch Kit                     | (3)      |
| 99   | 31-17-0101 | Cable Hold Down Kit           | (1)      |
| 104  | 14-46-0529 | Drum Shaft Kit                | (1)      |



| SCREW TORQUE SPECIFICATIONS |            |                        | SEAT TORQUE |         |
|-----------------------------|------------|------------------------|-------------|---------|
| FIG.                        | PART NO.   | WHERE USED             | (kgf-cm)    | (lb-in) |
| 1                           | 06-82-4003 | Main Housing - Bottom  | 10±1        | 9±1     |
| 48                          | 06-82-0032 | Battery Terminal Assy. | 7±1         | 6±1     |
| 76                          | 06-82-0226 | Main Housing - Bottom  | 6±1         | 5±1     |
| 78                          | 06-82-0907 | Counter PCBA Assy.     | 6±1         | 5±1     |
| 82                          | 05-81-0005 | Battery Terminal Assy. | 6±1         | 5±1     |
| 87                          | 05-74-0501 | Cable Hold Down        | 6±1         | 5±1     |

# MAIN LID / LENS ASSEMBLY

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



| FIG. | PART NO.   | DESCRIPTION OF PART             | NO. REQ. |
|------|------------|---------------------------------|----------|
| 1    | 06-82-4003 | M4 x 16mm Pan Hd. T-20 Screw    | (10)     |
| 2    | 22-68-0125 | USB Cover                       | (1)      |
| 3    | -----      | Head - Back                     | (1)      |
| 5    | 06-82-0027 | M3 x 7mm Pan Hd. T-10 Screw     | (9)      |
| 6    | 06-83-1001 | M3 x 1.058 Pan Hd. T-10 Screw   | (3)      |
| 7    | -----      | PCB Assembly                    | (1)      |
| 12   | -----      | Head - Front                    | (1)      |
| 14   | -----      | Camera Set Casing (Right)       | (1)      |
| 18   | -----      | Camera Set Casing (Left)        | (1)      |
| 21   | -----      | Connecting Base                 | (1)      |
| 23   | 05-81-1030 | Feed Tube Pan Hd. Screw         | (4)      |
| 24   | -----      | Feed Tube                       | (1)      |
| 25   | -----      | Wire Routing Cover              | (1)      |
| 26   | -----      | Storage Box Door Assembly       | (1)      |
| 27   | -----      | Sealing Tray Gasket             | (1)      |
| 64   | -----      | Lid Rotate Pin                  | (2)      |
| 76   | 06-82-0226 | M3 x 16mm Pan Hd. T-10 Screw    | (8)      |
| 86   | 48-53-3155 | 18mm 75ft. Camera Module (Accy) | (1)      |
| 88   | 23-28-0105 | Lens Assembly                   | (1)      |
| 92   | 31-15-0221 | Main Lid Assembly               | (1)      |
| 94   | 14-20-0341 | Main PCBA Assembly              | (1)      |
| 95   | -----      | Thermal Pad                     | (1)      |
| 98   | 31-17-0100 | Cable Holder Kit                | (1)      |
| 100  | 45-96-0081 | Camera Wrench                   | (1)      |
| 101  | -----      | Small D18 Skid                  | (1)      |
| 102  | -----      | Large D18 Skid                  | (1)      |
| 103  | 48-53-3156 | D18 Skid Kit                    | (1)      |
| 105  | 14-46-0822 | Feed Tube Kit                   | (1)      |

## SCREW TORQUE SPECIFICATIONS

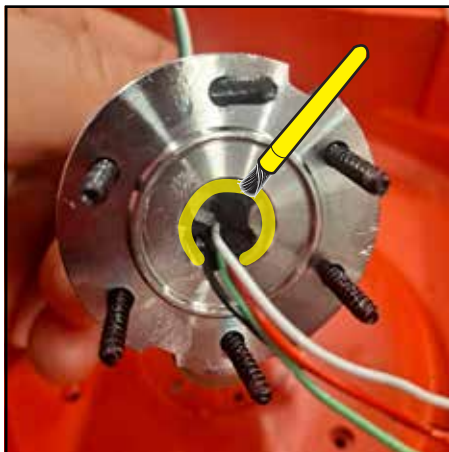
| FIG. | PART NO.   | WHERE USED           | SEAT TORQUE |         |
|------|------------|----------------------|-------------|---------|
|      |            |                      | (kgf-cm)    | (lb-in) |
| 1    | 06-82-4003 | Lens Assembly - Back | 16±1        | 14±1    |
| 5    | 06-82-0027 | Main PCBA Assembly   | 4±1         | 3±1     |
| 6    | 06-83-1001 | Main PCBA Assembly   | 6±1         | 5±1     |
| 23   | 05-81-1030 | Feed Tube            | 8±1         | 7±1     |
| 76   | 06-82-0226 | Cable Holder         | 6±1         | 5±1     |

## GLUING / LUBRICATION INSTRUCTIONS




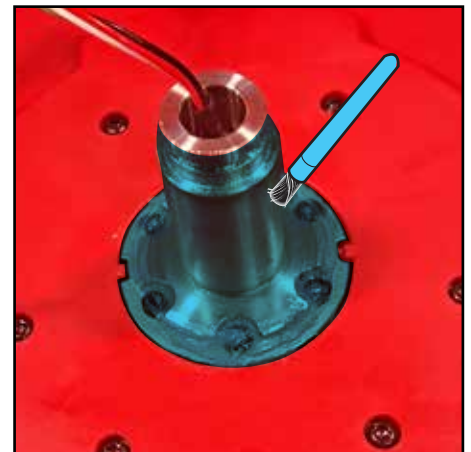
**NOTE**  
 Regarding parts to be glued: Apply a light coating of sealant to highlighted area inside of drum shaft (39) prior to installing two foam speaker pads (74). Reference the key below for glue type.

 = 1598 Sealant



**NOTE**  
 Regarding parts to be lubricated: Apply a light coating of grease to drum shaft (39), shown highlighted, prior to installation of drum housing. Reference the key below for grease type.

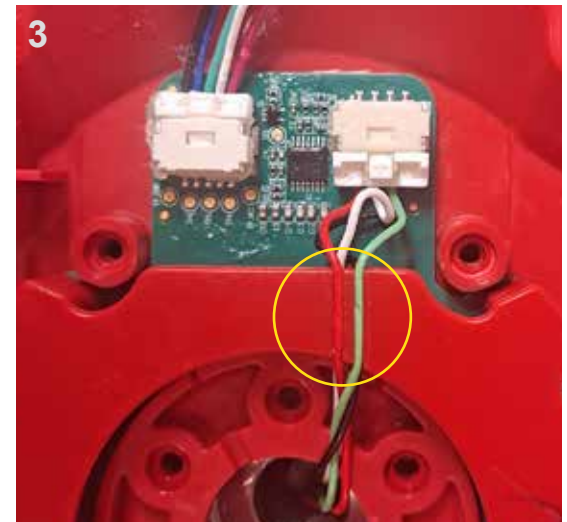
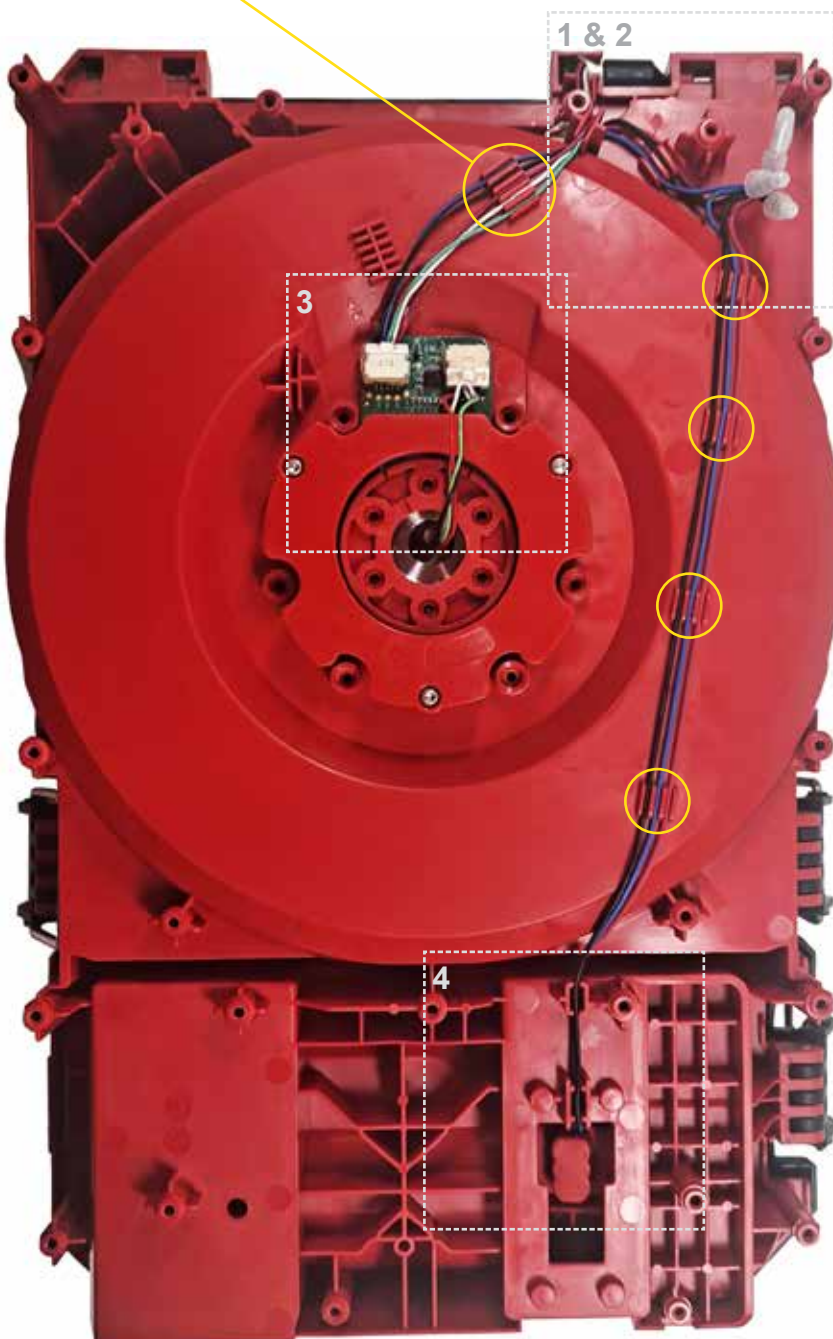
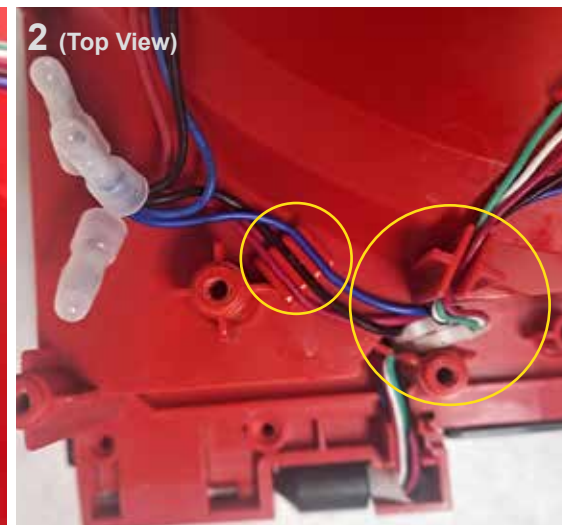
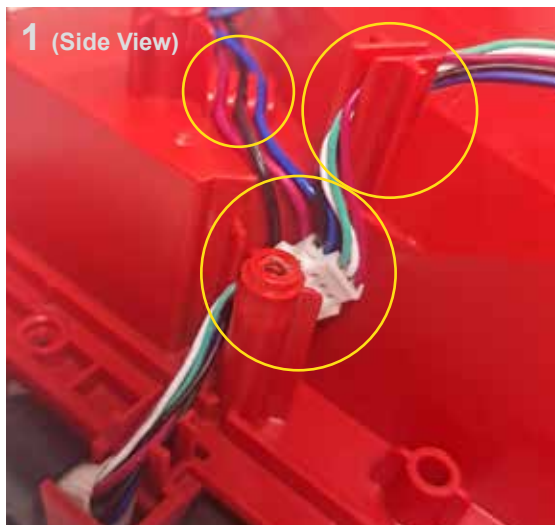
 = Type "J" Grease, 49-08-4220



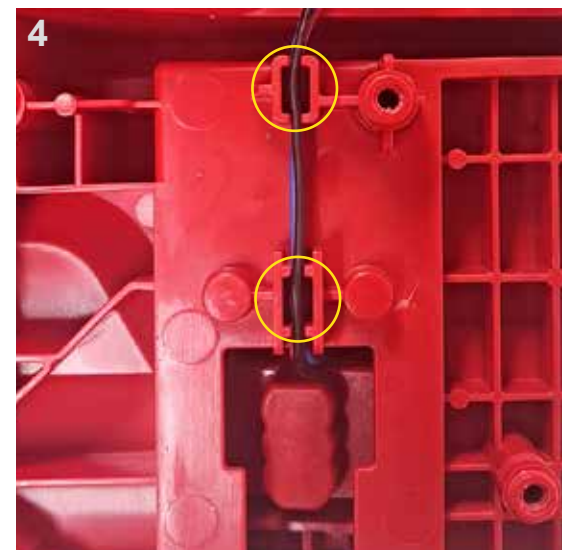
## WIRE ROUTING

Make sure to tuck wires and connectors into grooves as shown so there are no obstructions when fastening to the bottom housing. Wind the closed-end terminals together.

Tuck all wires into grooves on back of main tray assembly (circled in yellow below)



Connect both wire terminals to PCBA and position wires into grooves.



Place wires from battery terminal/holder into the grooves as shown.