



**SPARTAN**

FOR TOUGH CUSTOMERS.

SINCE 1943



**SERVICE MANUAL**

**Traveler 2.0**

Spartan Tool LLC | 1618 Terminal Road | Niles, MI 49120  
order by phone **800.435.3866** order online **SpartanTool.com**

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Part #64200010



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## SPECS

<b>Pipe Sizes</b>	2" to 6" diameter
<b>Resolution</b>	640 x 480
<b>Push Rod</b>	200' of high-efficiency, super-slick push rod with ballistic-grade woven fiber jacket; optional Trap Eze® mini-camera available in 50' length for the smallest lines
<b>Weight</b>	34 lbs complete with Apple® iPad or Samsung Galaxy Tab®
<b>Size</b>	22.5"W x 26"H x 12"D
<b>Monitor</b>	Apple® iPad (9.7") or Samsung Galaxy Tab® (9.7")
<b>Camera Head</b>	1 <sup>3</sup> / <sub>8</sub> " diameter self-leveling color camera head

## FEATURES

- Removable push rod reel for quick changes in the field
- Touchscreen control of all features
- Telestrator technology allows you to highlight any problem with the touch of a finger
- On-screen, full QWERTY keyboard
- Sapphire glass lens reduces scratching
- Waterproof, self-leveling camera head
- 512 Hz locating beacon
- 110 volt or battery operation
- Up to six hours of battery life on a single charge
- Freeze-frame snapshot capability at any time
- Add text at any time to any video or snapshot
- Changeable font sizes, colors and locations
- Easily removeable Apple® iPad or Samsung Galaxy Tab® communicates via Wifi router connection, allowing you to move anywhere on the job site
- Full tablet capabilities allow you to email a recorded video at any time
- Camera centering guide included
- Built-in microphone allows easy job site narration
- On-screen, repositionable footage camera
- Camera light intensity rheostat
- Lithium-ion battery technology
- Built-in transport cart with extending handle and high-clearance wheels
- Heavy-duty molded case protects unit in harshest conditions

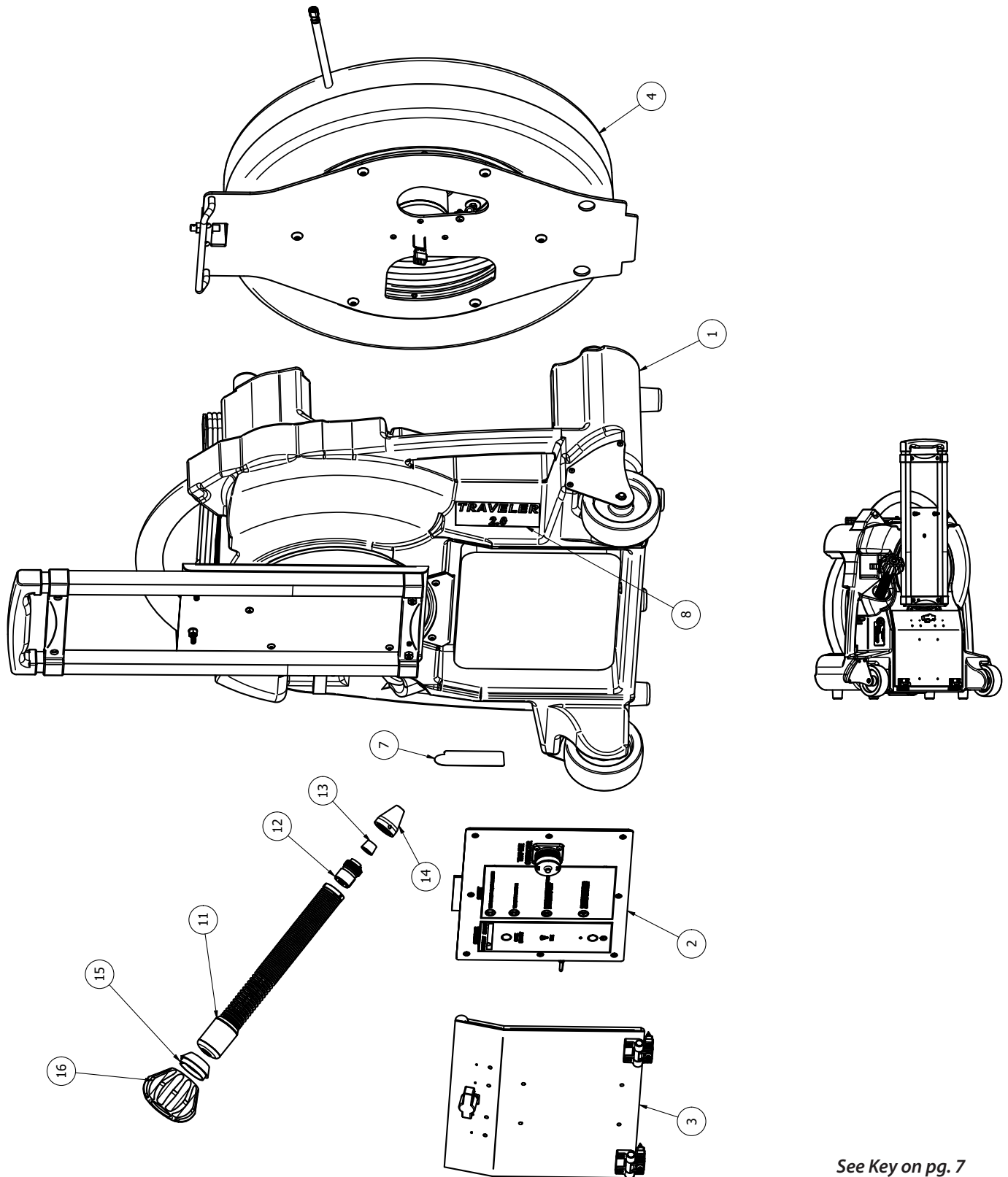
## OPTIONAL ITEMS

- Trap Eze® mini-camera available in 50' length for the smallest lines
- Locator with four frequencies: 512B Hz (beacon), 33B kHz (beacon), 65 kHz, 60 Hz, 150 Hz, 120 Hz



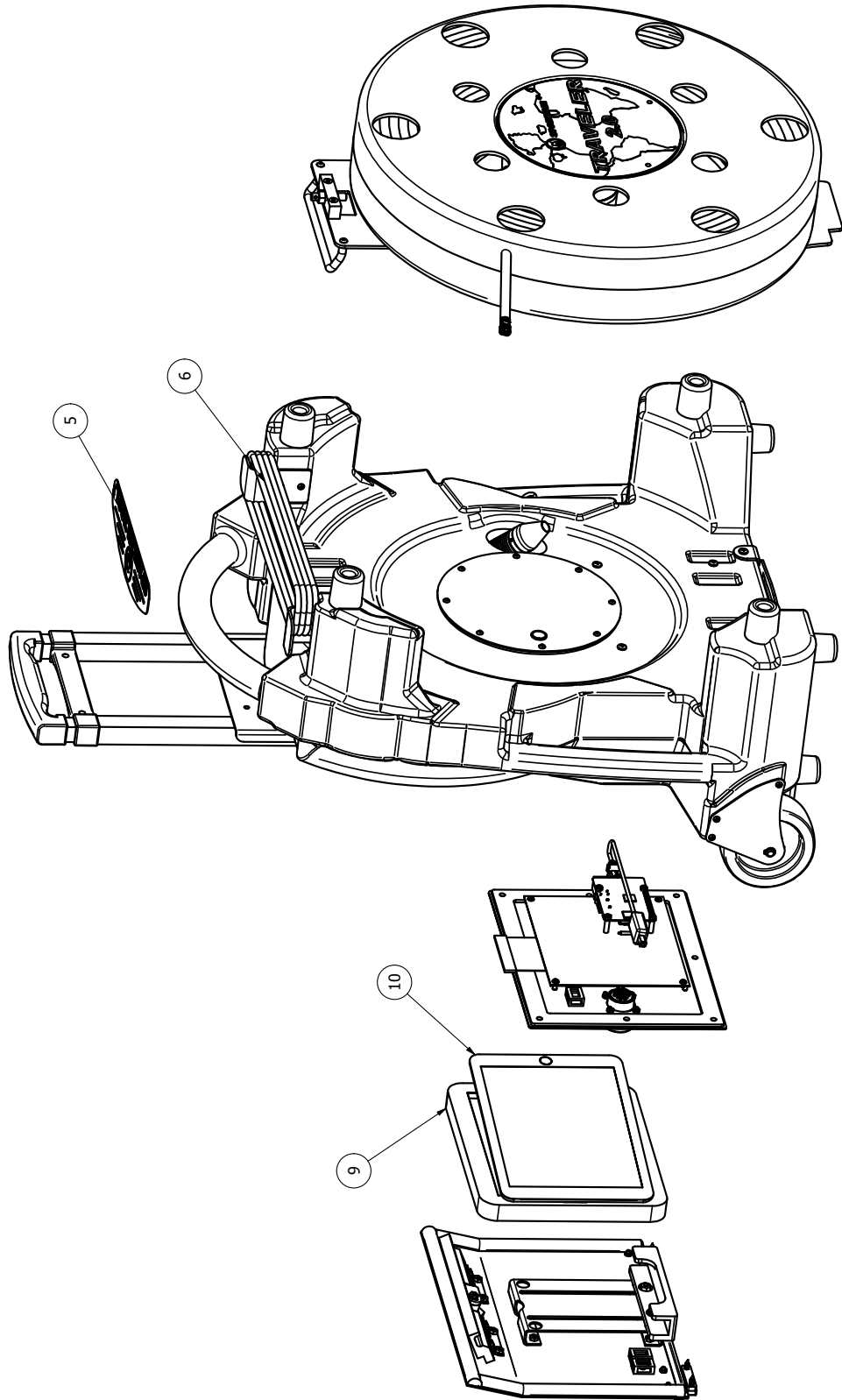
# Final Assembly

## FINAL ASSEMBLY (6420000)



See Key on pg. 7

# Traveler 2.0 Final Assembly



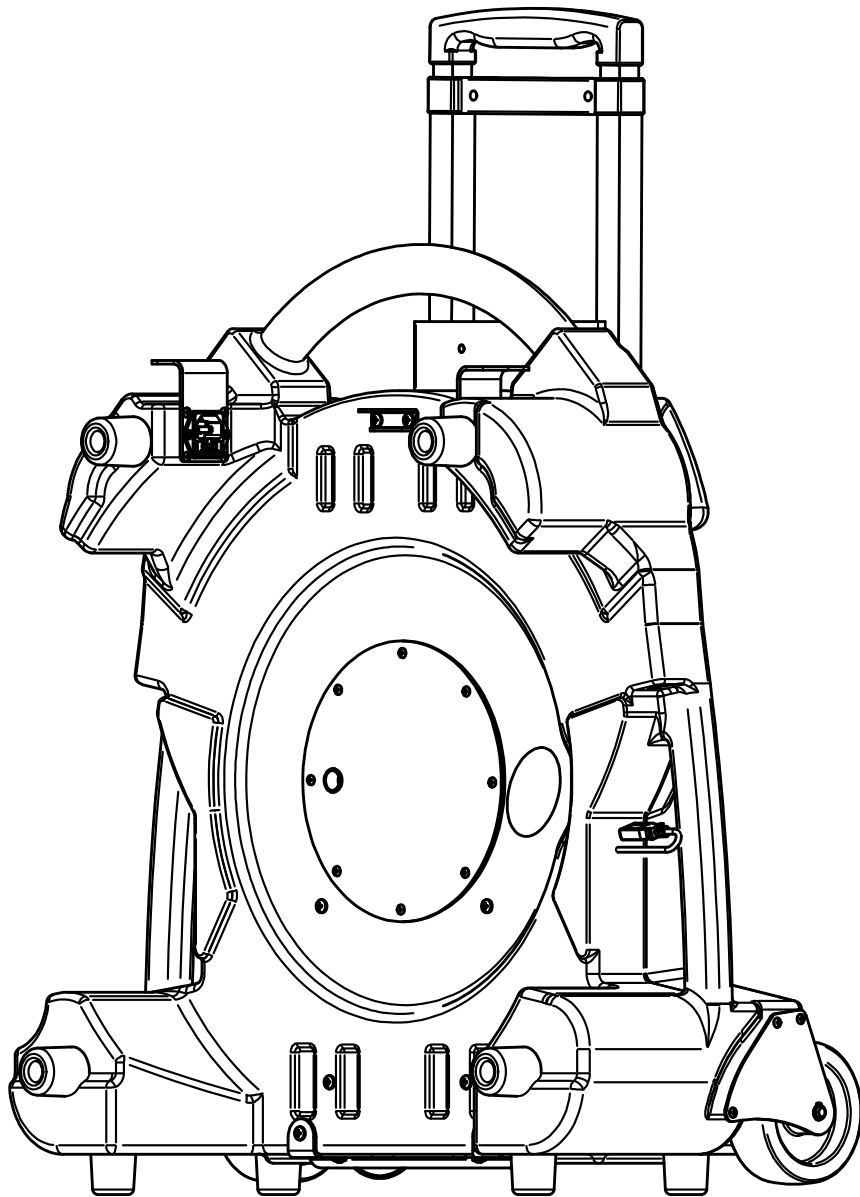
See Key on pg. 7

# Traveler 2.0 Final Assembly

## **Key for Drawings on pg. 4-5**

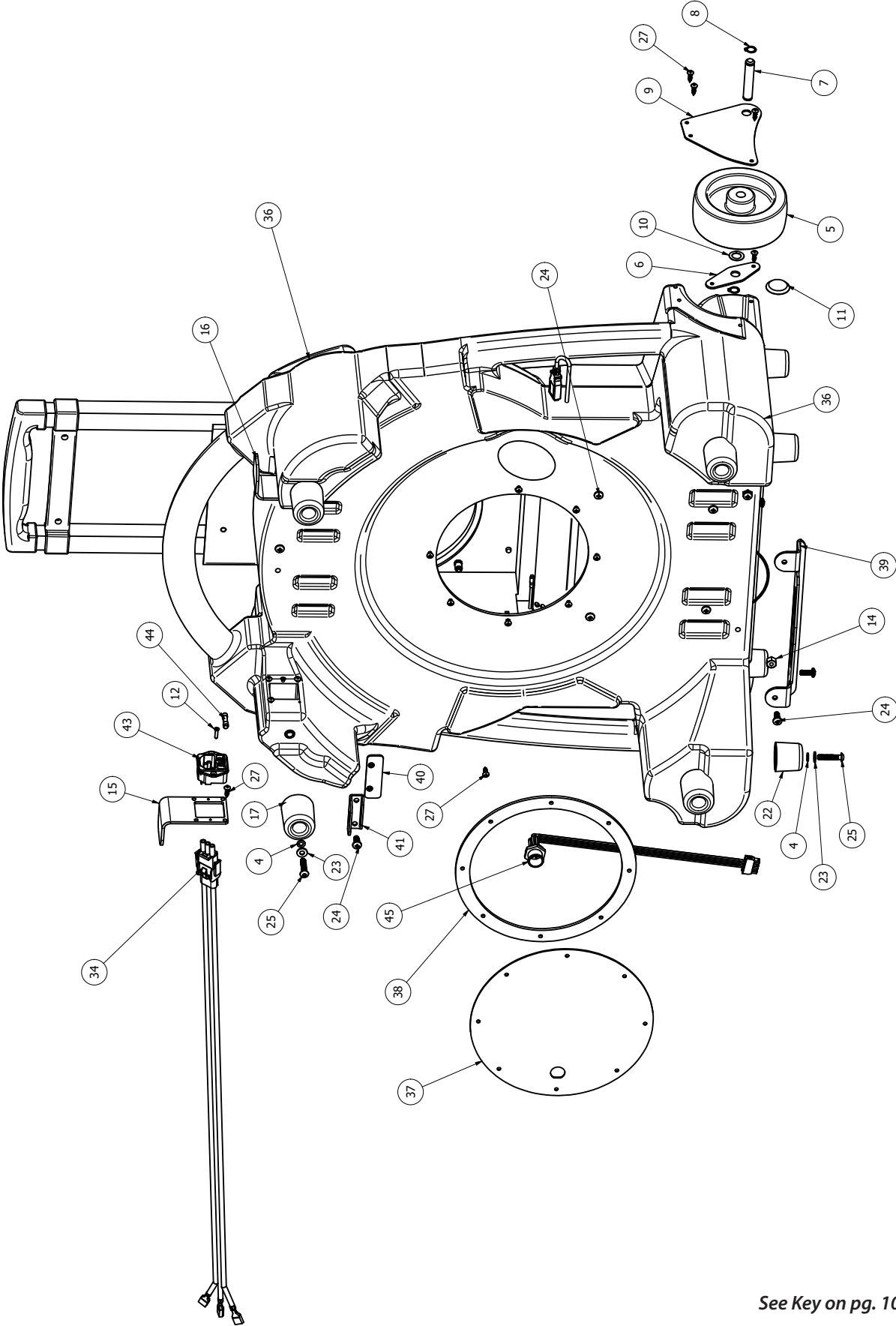
Item	Part Number	Description	Qty.
1	64028100	Assembly, Base Traveler P3	1
2	64050040	Assembly, Control Panel, Phase 2 & 3	1
3	64050018	Assembly, Hinged Door	1
4	64028200	Assembly, Cartridge Drum Traveler 2	1
5	63030080	Decal, Front - Pro Touch	1
6	64020010	AC Power Cord, 118"	1
7	64050093	Decal, Sideplate - Serial	1
8	64050092	Decal, Traveler 2	1
9	64020260	Tough Case, iPad Gen 5	1
10	64020250	iPad - 32 GB 6th Gen	1
11	64020300	Camera Flex Assembly - Sparvision	1
12	64020220	Bushing - Combo - .405	1
13	64020210	Ferrule, .405 ID	1
14	63030110	Backshell, Connector - PT	1
15	61047000	Locking Ring, Centering Guide	1
16	61046900	Body, Camera Centering Guide	1
17	64020015	Decal, iPad Charging Cord Flag	1

**ASSEMBLY, BASE TRAVELER (64028100)**



*See Key on pg. 10-11*

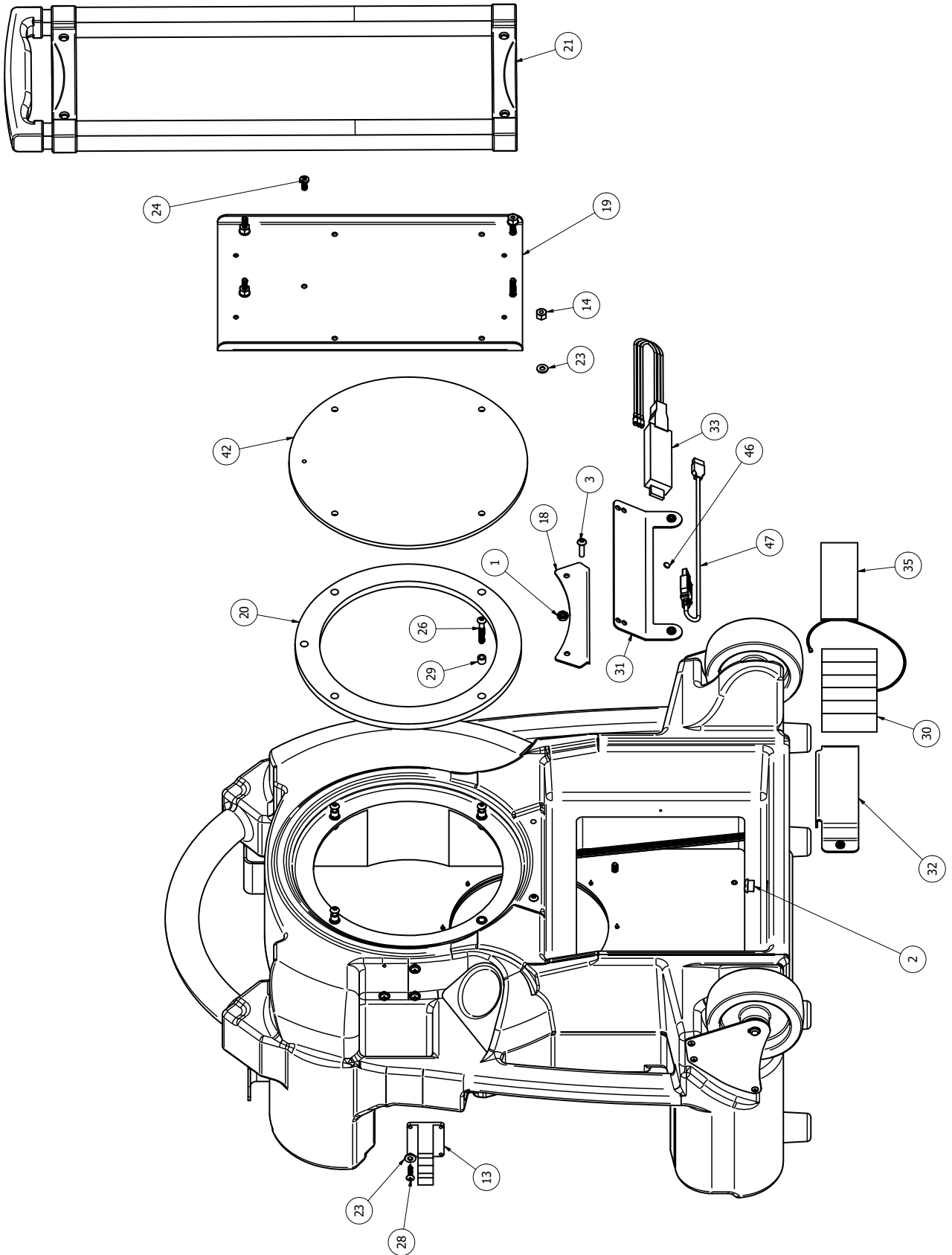
# Assembly, Base Traveler



See Key on pg. 10-11



# Assembly, Base Traveler



See Key on pg. 10-11

# Assembly, Base Traveler

## Key for Drawings on pg. 7-9

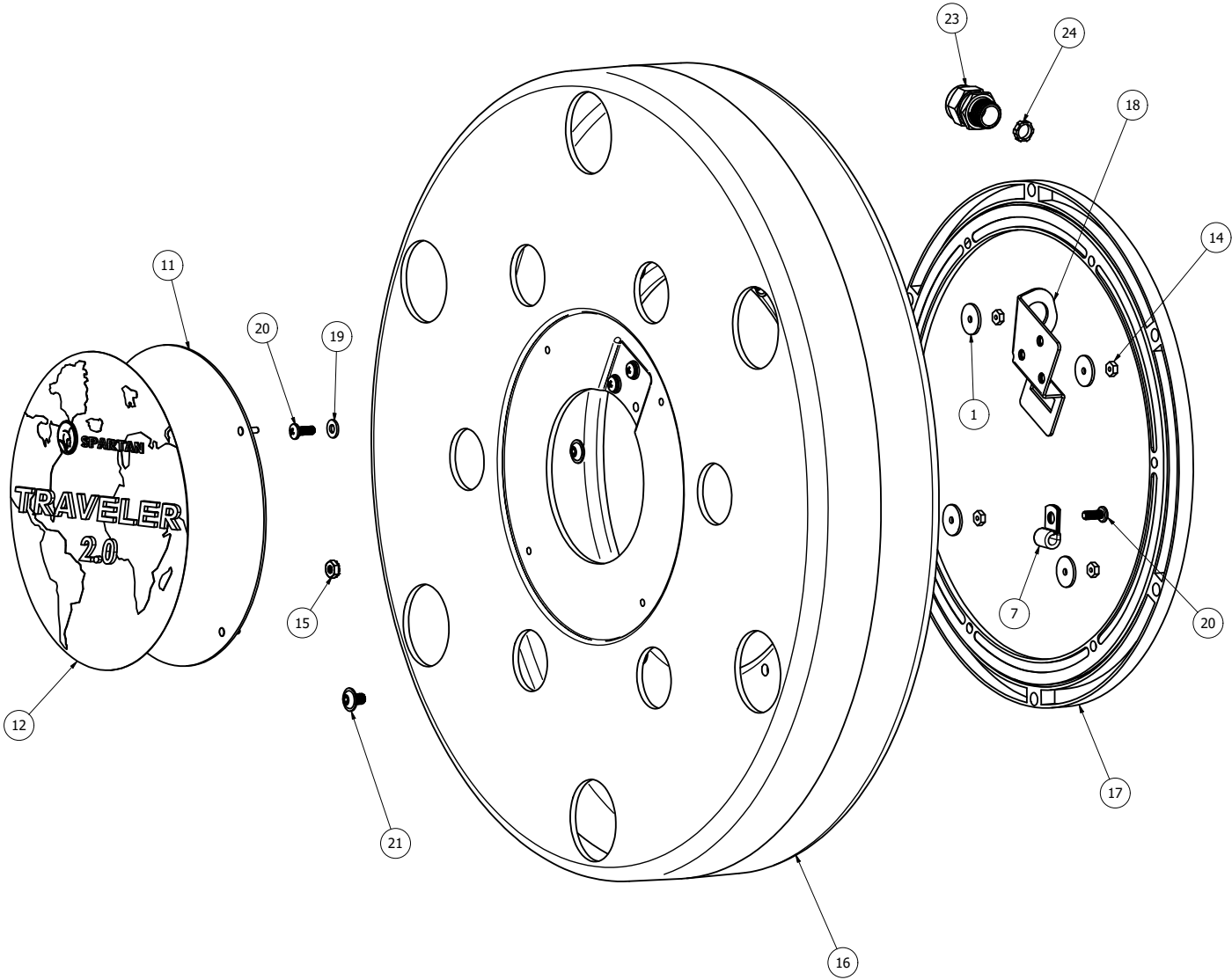
Item	Part Number	Description	Qty.
1	03850100	Nut, Hex Keep 10 x 32 zinc plated	2
2	62021900	Bushing, Strain Relief	1
3	63032155	Screw, BT HD 10 x 32 x ¾ black	2
4	64021080	Lock Washer, #10 alum	8
5	64022400	Wheel, 4" black plastic ¾ BR	2
6	64022410	Plate, Interior Wheel Mount	2
7	64022420	Axle, 4" Wheel - ¾" OD	2
8	64022430	Snap Ring, External - ¾" SFT	4
9	64022440	Plate, Exterior Wheel Mount	2
10	64022450	Washer, Plastic - .39 OD	2
11	64022620	Plug, ½" hole dia - black	1
12	64023700	Screw, sheet metal #4 x ½" flat	2
13	64026100	Rubber Clamp, Mini Quick	1
14	64027400	Nut, Nylon Lock - 10 x 32 blk	8
15	64050000	Bracket AC Receptacle	1
16	64050004	Bracket, AC Power Cord	1
17	64050005	Foot, Round HGT 1.50	4
18	64050007	Plate, Pawl Latch	1
19	64050008	Plate, Handle Support	1
20	64050010	Gasket, Circle Cover	1
21	64050011	Telescoping Handle Modified	1
22	64050012	Foot, Round HGT 1.125	4
23	64050014	Washer #10 SS black	16
24	64050020	Screw #10 x ½ button head	11
25	64050021	Screw, 10 x 32 x 1" button head	8
26	64050025	Screw, 10 x 32 x 1.5" button head	4
27	64050025	Screw, #6 x ½" sheet metal	22
28	64050029	Screw, #8 x ¾" sheet metal	6
29	64050031	Spacer, unthreaded #10	4
30	64050035	Battery, Traveler 6-cell	1
31	64050041	Bracket, Video Capture Mount	1
32	64050042	Bracket, 6 Cell Mount	1

# Assembly, Base Traveler

Item	Part Number	Description	Qty.
33	64050044	Module, Video Capture	1
34	64050045	Cable AC Harness ASM	1
35	64050054	Cushion, Battery Pack	1
36	64050056	Base, Machined P3 Traveler	1
37	64050059	Plate, Base Cover P3 Traveler	1
38	64050061	Gasket, Base Cover	1
39	64050066	Bracket, Drum Plate Mount	1
40	64050067	Plate, Backup Lock Latch	1
41	64050068	Plate, Lock Latch	1
42	64050073	Plate, Circle Handle Mount	1
43	64050077	Connector, Power Entry	1
44	64050078	Fuse, Cartridge	2
45	64050098	Cable, Buckhead ASM P3 Traveler	1
46	64050111	Foot, Rubber Dome Shape	1
47	64050052	Cable, USB 2.0 A/M to A/F	1

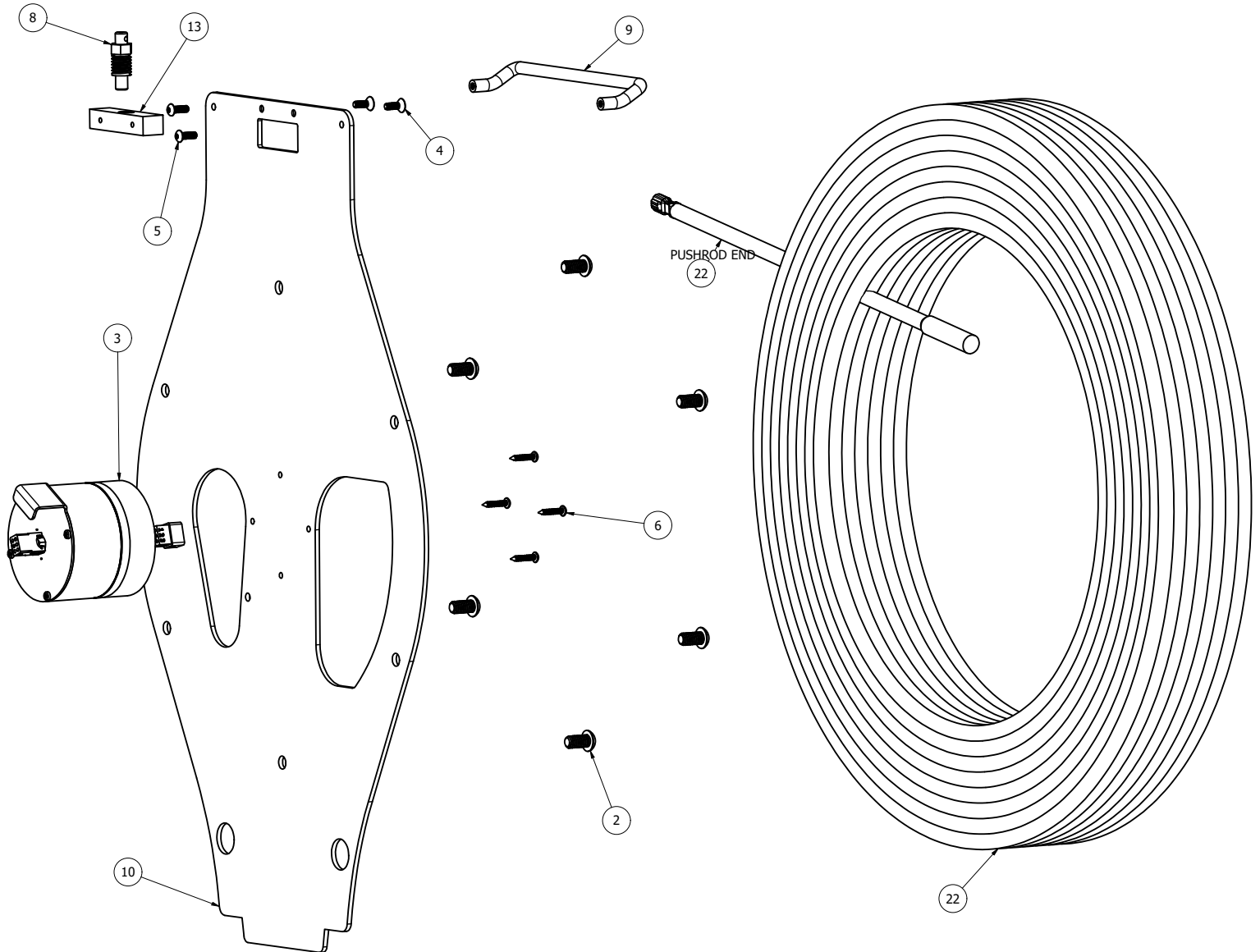
# Cartridge, Drum Assembly

## CARTRIDGE, DRUM ASSEMBLY (64028200)



See Key on pg. 14

# Cartridge, Drum Assembly



See Key on pg. 14

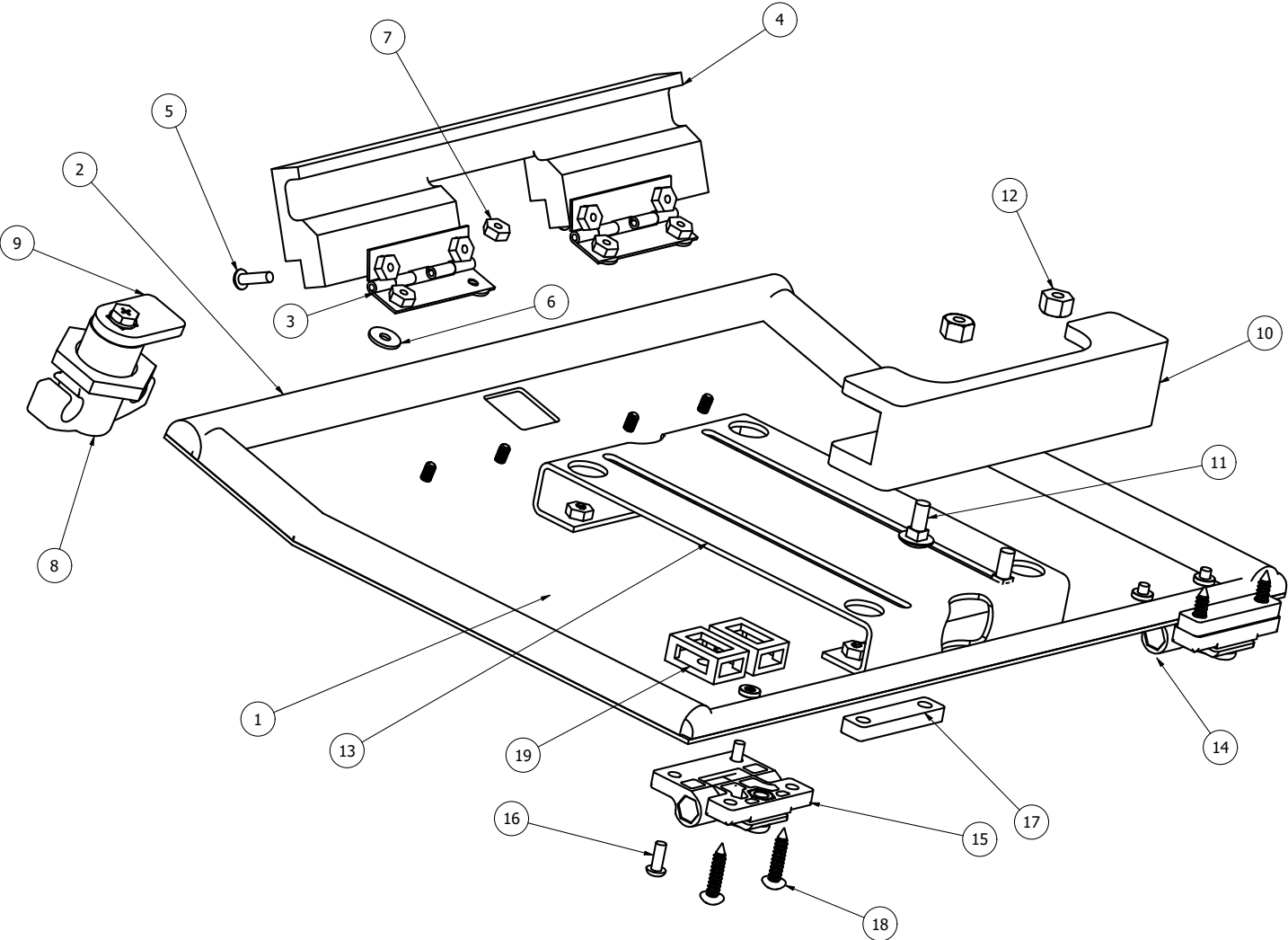
# Cartridge, Drum Assembly

## Key for Drawings on pg. 12-13

Item	Part Number	Description	Qty.
1	64050090	Washer, Drum Cover	4
2	64050089	Screw, 5/16" x 5/8"	6
3	64050087	Assembly, Encoder P3 Traveler	1
4	64050084	Screw, 8 x 32 x 1/2" flat head	2
5	64050083	Screw, 8 x 32 x 1/2" button head	2
6	64050082	Screw, 5 x 32 x 3/4"	4
7	64050080	Clamp, Drum Cable	1
8	64050075	Pin, Plunger Lock	1
9	64050074	Handle, Carry Drum	1
10	64050070	Plate, Drum Mounting	1
11	64050069	Plate, Drum Cover P3 Traveler	1
12	64050063	Decal, Drum Cover	1
13	64050060	Block Locking Pin	1
14	64022780	Locknut, 6 x 32 NY insert	4
15	03850100	Nut, Hex Kep 10 x 32 zinc plated	1
16	64050050	Drum, Traveler	1
17	64021300	Bearings	1
18	64050062	Pushrod Bracket	1
19	64050014	#10 Blk SS Washer	3
20	64050020	#10-32 x 1/2" Button Head Screw	4
21	64050091	1/4-20 x 3/8" Flange Button Head Screw	6
22	64020105	Assembly, Pushrod & Ends	1
23	64050076	Cord Grip, Traveler P3	1
24	64050114	Locknut, 3/8" trade size	1

# Hinge Door Assembly

## HINGE DOOR ASSEMBLY (64050018)



See Key on pg. 16

# Hinge Door Assembly

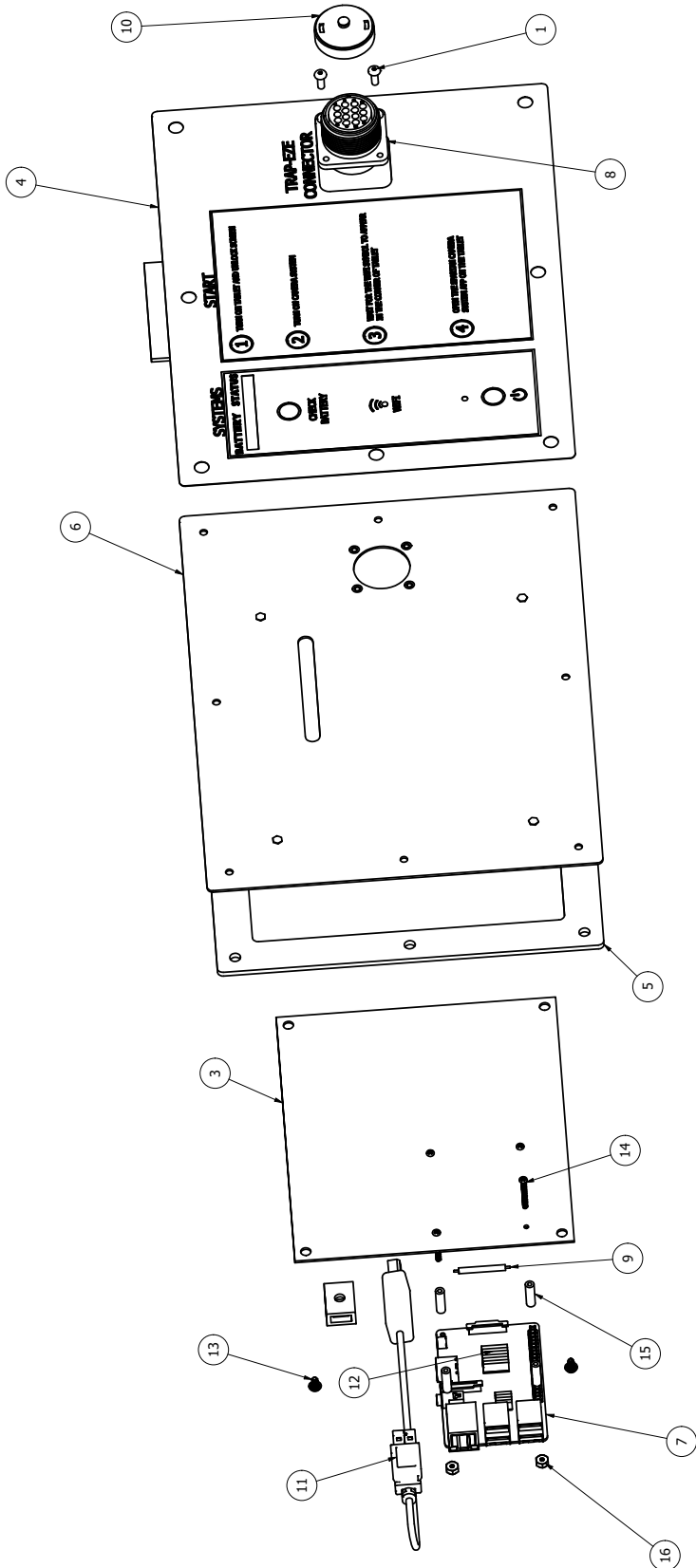
## Key for Drawing on pg. 15

Item	Part Number	Description	Qty.
1	64050006	Plate Cover	1
2	64050019	Foam Rubber Seal, $\frac{5}{8} \times \frac{3}{8}$	3
3	64022970	Hinge Torsion	2
4	64050112	Grab Upper	1
5	64022770	Screw, #6 x 32 x $\frac{1}{2}$	4
6	64022915	Washer, nylon black	4
7	64022780	Locknut, #6 x 32 black	12
8	64050002	Knob Cam Lock	1
9	64050001	Pawl Lock	1
10	64027200	Grab Lower	1
11	64027300	Screw, square neck	2
12	64027400	Lock Nut, #10 x 32 black	2
13	64027100	Plate Universal Table Mtg	1
14	63031010	Foam Rubber Seal, $\frac{3}{8} \times \frac{7}{32}$	1
15	64022980	Hinge Friction	2
16	64022925	Screw, 6 x 32 x $\frac{3}{8}$	4
17	64022990	Shim, large	2
18	64050029	Screw, #8 x $\frac{3}{4}$ black	4
19	64024210	Mounting Base, zip tie	2



# Control Panel, Assembly Phase 2 & 3

## CONTROL PANEL ASSEMBLY PHASE 2 & 3 (64050040)



Item	Part Number	Description	Qty.
1	64022925	Screw, 6 x 32 x 3/8 SK BTN HD BL	4
2	64024210	Mounting Base, zip tie	1
3	64050027	Board, Interface P2	1
4	64050030	Overlay, Control Panel Trav	1
5	64050034	Gasket, Control Panel	1
6	64050036	Plate, iPad Compartment Cover	1
7	64050043	Raspberry Pi	1
8	64050046	Cable, Trapeze ASM	1
9	64050048	Adapter, RCA	1
10	64050051	Cap, Trapeze	1
11	64050047	Cable, USB 2.0 A/M to B/F	1
12	64050055	Micro SDHC, 8GB no adapter	1
13	64050099	Screw, 4 x 40 1/4" Phill Pan HD	4
14	64050100	Screw, 2 x 56 x 7/8" Phill Pan HD	4
15	64050101	Spacer, Nylon 5/8" long	4
16	64050102	Nut, 2-56 Nylok	4



# Traveler Encoder / Slip Ring Assembly

## **Key for Drawing on pg. 18**

Item	Part Number	Description	Qty.
1	64050053	Slip Ring Assembly	1
2	64050064	Shaft Encoder Driver	1
3	64050058	Encoder Housing, bottom	1
4	64049800	Cable Drum Assembly, Traveler	1
5	63039100	Encoder Assembly	1
6	64050071	Gasket, foam	1
7	64050057	Encoder Housing, top	1
8	64050079	Encoder Plate, drive	1
9	64050086	Locking Nut, 18-8	1
10	63039540	Connector, 6P	1
11	62008900	Screw, #4 3/8	4
12	64050085	Screw, #1 18-8 thread forming	4
13	64050025	Screw, #4 1/2	3



# Warranty Information

Spartan Tool warrants its equipment to be free from defects in material and workmanship for one year from the date of purchase. To obtain warranty service, a purchaser should notify Spartan Tool in writing, at the address provided below, within the warranty period, and Spartan Tool will direct where to take or send the equipment for service. If the defect is covered by the warranty, Spartan Tool will repair or replace, at its option, the defective equipment, without charge for labor or materials (freight and insurance are the purchaser's responsibility).

This warranty is limited to the original retail purchaser and is not transferable. Spartan Tool assumes no responsibility for damage due to accident, neglect, abuse, tampering or misuse, nor damage from repairs or alterations by others. This warranty does not cover damage to the equipment resulting from the use of replacement parts other than Spartan Tool parts.

Spartan Tool's sole obligation and the original purchaser's exclusive remedy under this warranty shall be for repair or replacement as described above. ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL SPARTAN TOOL BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES

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*Spartan Tool LLC reserves the right to make changes at any time, without notice, to specifications and models and also discontinue models. The right is also reserved to change specifications or parts at any time without incurring any obligation to equip same on models manufactured prior to the date of change.*

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