

# INSTALLER'S GUIDE

## BDS-0050: SWING MOUNTED ASSISTANT VAC PAC FOR BEL-50 AND BEL-20N DENTAL CHAIRS

Location for all the incoming utilities should be in accordance with the cabinet installation instructions.

### BDS-0050

#### Tools Required:

Phillips Screwdriver, 1/8" & 5.5 mm Hex Key Wrench

1. **Remove plastic dome casting cover from chair.** Gently pry off decorative white plastic screw head covers. *Please refer to figure 1 & 2.* Remove (4) Phillips head screws and plastic countersink washers (one from each side and two from the top surface).

**NOTE:** Seat may be unlocked & rotated for improved screwdriver access to screws on top surface.

### CAUTION

Caution must be used in this step to avoid possible injury and damage to part.

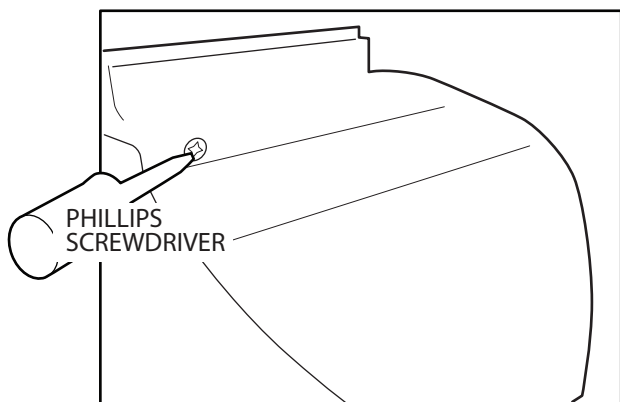


Figure 1. Remove caps and screws from side of dome casting cover. (Right side/Front view)

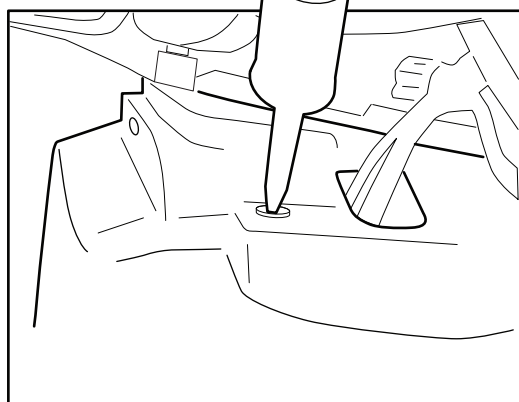


Figure 2. Removing top screw, dome casting cover. (Rear view)

2. **Remove rear access panel from the dome casting cover.** *Please refer to figure 3 & 4.* Using a Phillips screwdriver, remove small screw located inside of the dome casting cover. Remove rear mount access panel cover. Access panel cover is not needed again unless Vac Pac is removed at a future time.

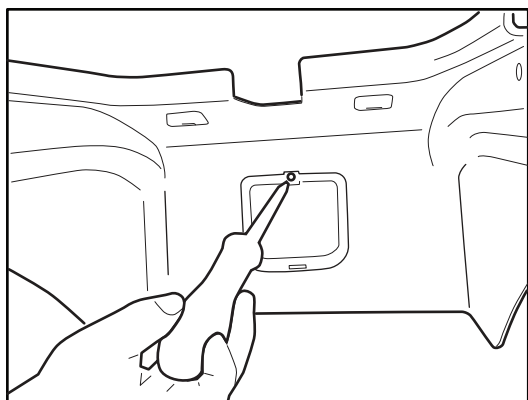


Figure 3. Removing rear access panel screw. (Screw located inside of the dome casting cover).

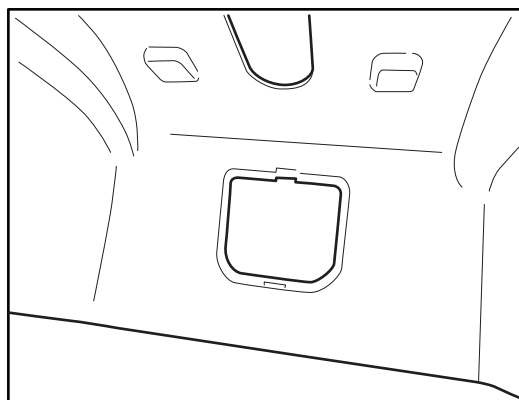


Figure 4. Rear access panel with cover removed.



A DIVISION OF TAKARA BELMONT USA, INC.  
101 Belmont Drive Somerset, NJ 08873  
Phone: (800) 223-1192 Fax: (732) 356-1035

### 3. Attaching the Vac Pac to the chair. Please refer to figure 5, 6 & 7.

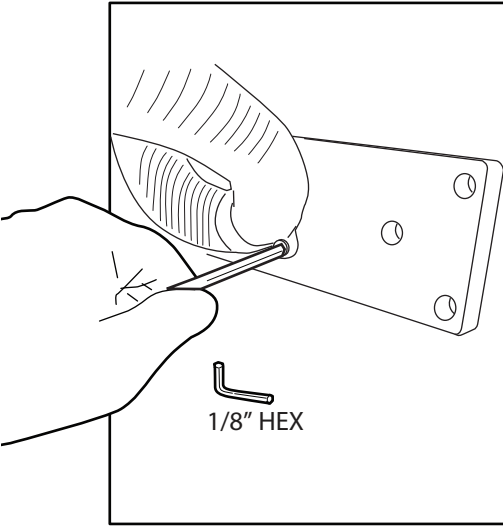


Figure 5. Remove the umbilical retaining clamp from the bottom of the Vac Pac mounting bracket.

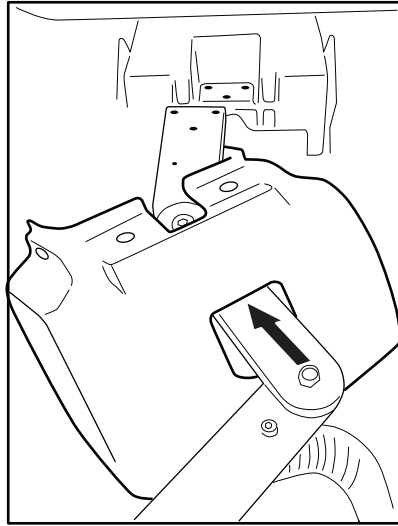


Figure 6. Slide plastic dome casting cover over the end of the mounting bracket and arm linkage.

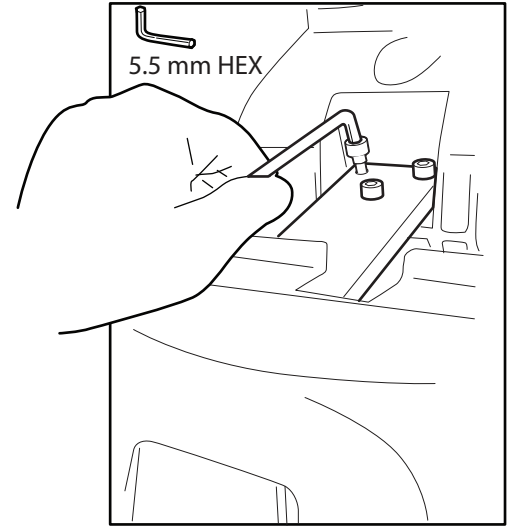


Figure 7. Secure the mounting bracket to the chair using the (3) M8 cap head screws provided.

### 4. Re-attach the dome casting cover.

Slide the dome casting cover back over arm linkage and mounting bracket and re-attach to the chair using the hardware removed in step 1.

### 5. Re-attach the umbilical retaining clamp.

Re-attach the umbilical and clamp to the bottom of the Vac Pac mounting bracket, using the screw removed in step 3 (Figure 5).

### 6. Routing the Vac Pac umbilical underneath the seat area. Please refer to figure 8, 9 & 10.

From the back side of the chair, feed the umbilical upward and underneath seat area, along the outside of the spring area.

Route the umbilical upward and underneath seat area. (Figure 8 & 9).

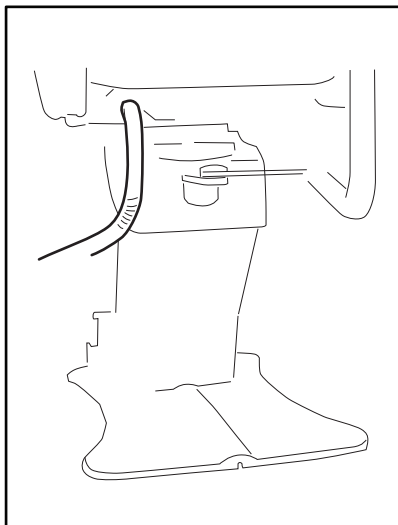


Figure 8. View is from rear of chair.

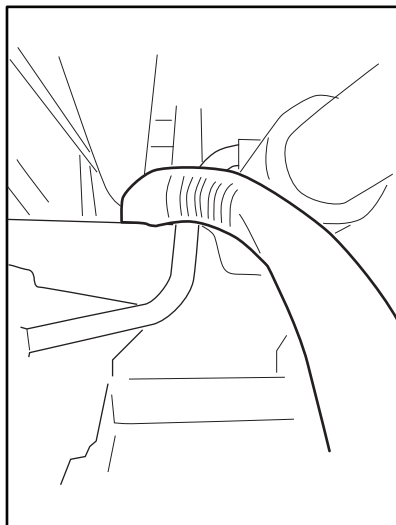


Figure 9. View is from rear of chair.

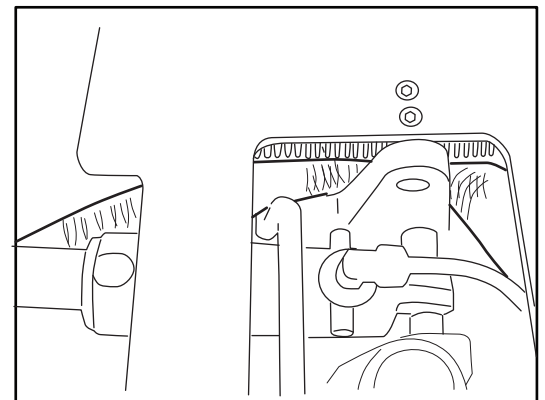


Figure 10. Top view of seat area. Left is back of seat / Right is front of seat.

**For Bel-20N Chairs:** Please refer to figure 10. Pull the umbilical upward and route along the outside of the spring area.

**Bel-50 Chairs:** *Please refer to figure 11.*

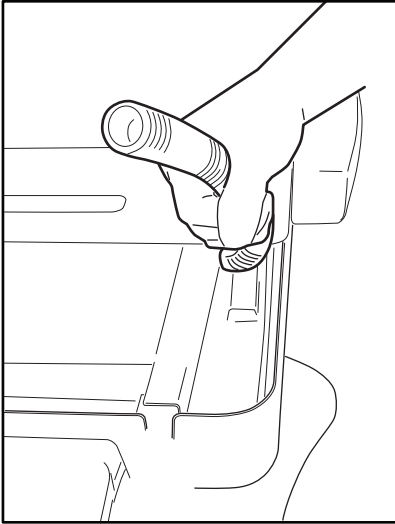


Figure 11. Pull the umbilical upward and route along the outside of the spring area. (View shown: front/right)

Use Phillips screwdriver to remove screws from plastic seat housing cover shroud on one side of the seat. *Please refer to figure 12, 13 & 14.*

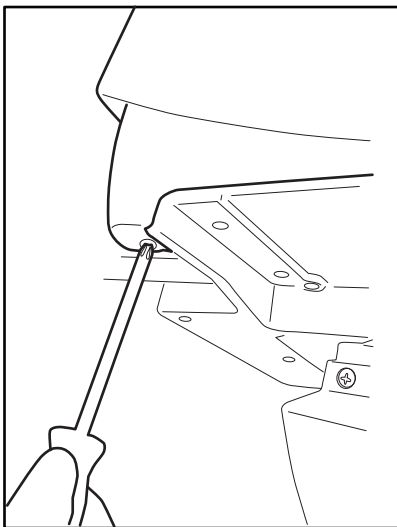


Figure 12. Remove screw underneath the plastic cover in front of the chair. (One side only).

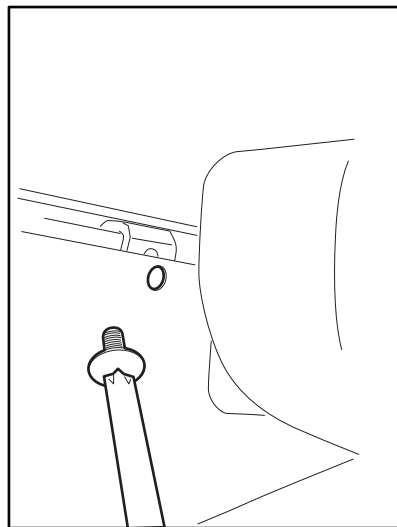


Figure 13. Remove screw on the outside plastic cover, adjacent to armrest casting. (One side only).

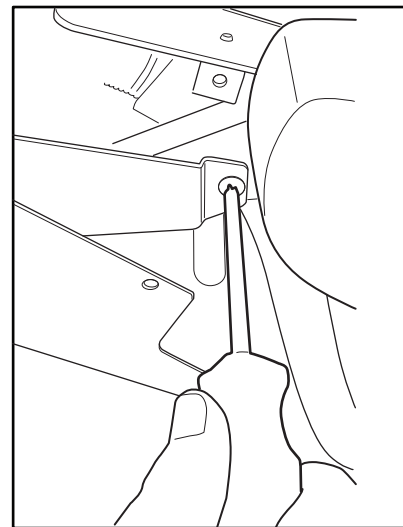


Figure 14. Remove screw from inner plastic cover, adjacent to armrest casting. (One side only).

7. **Routing the Vac Pac umbilical into the umbilical duct hose.** *Please refer to figure 15 & 16.*  
Pull umbilical out through the notched cut-out, in front of the seat. Vac Pac umbilical and delivery system umbilical are both fed together into the outer umbilical duct hose and connected to the J-box.

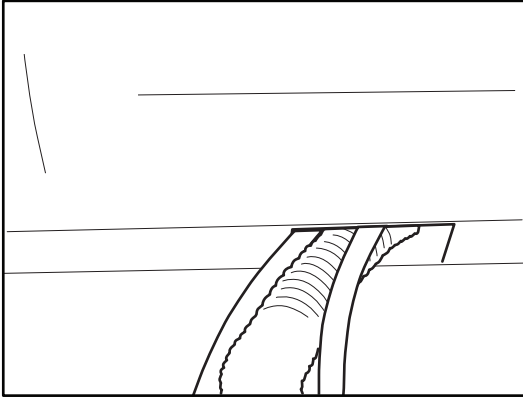


Figure 15. Vac Pac umbilical tubing exits through notched cut-out in front of the seat.

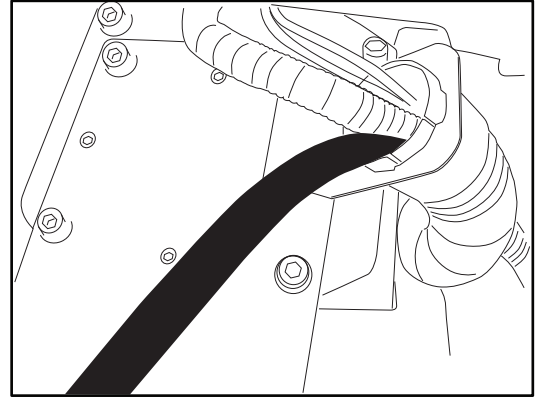


Figure 16. Delivery system umbilical shown here in black.

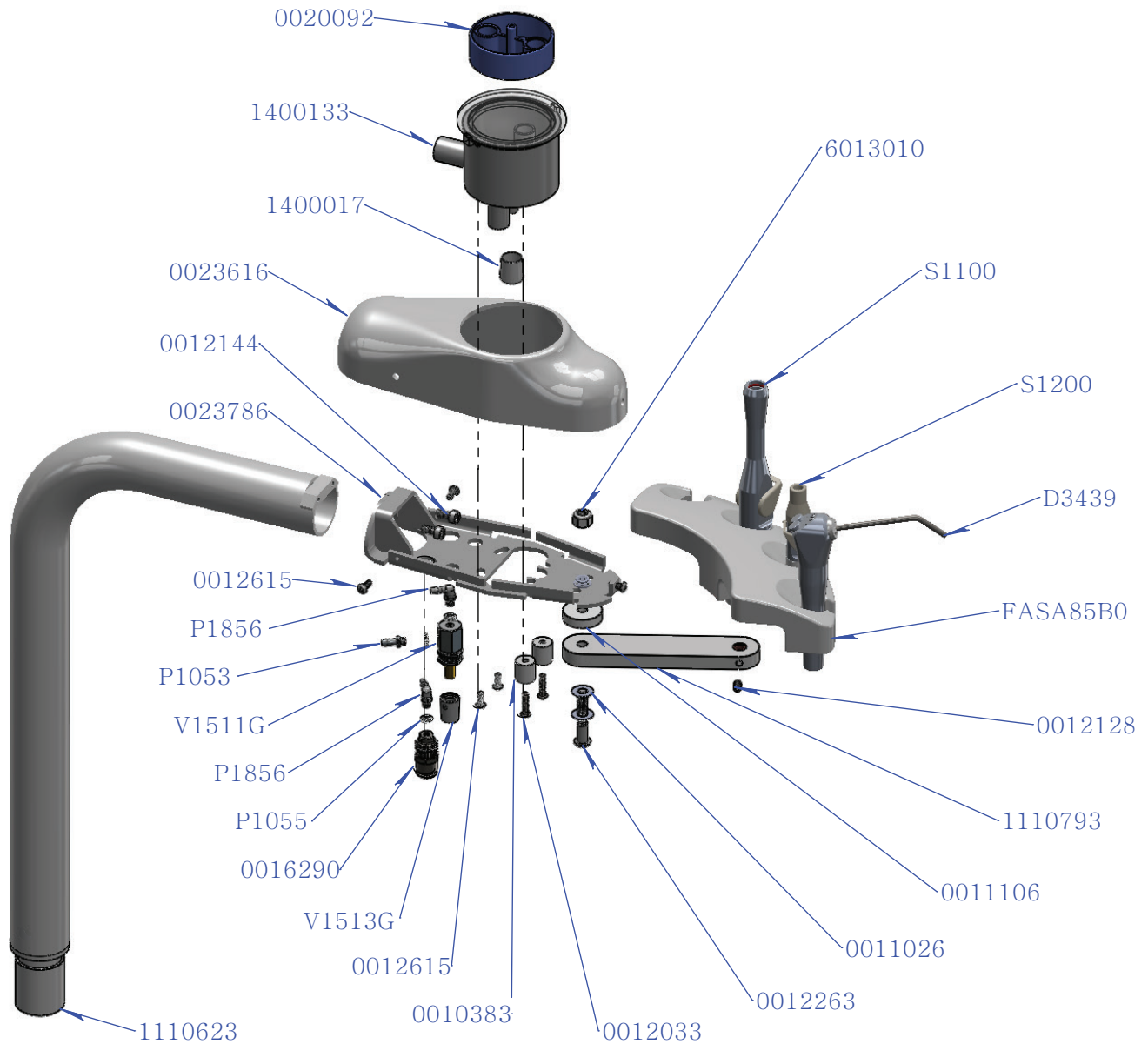
8. **Connections.**

Vac Pacs are shipped without Air and Water Regulator/Filter/Valve assemblies or J-Box cover and frame. Syringe air, syringe water, outlet water supply should be connected to delivery system floor utilities. Connect vacuum drainage line to suction source in floor.

9. **Verification.**

Verify that all connections to Air, Water and Vacuum are leak-free. Verify that HVE and SE suction are adequate, syringe air and water are satisfactory and that the adjustable water outlet is functional.

# INSTALLATION & ASSEMBLY (BELMONT BDS-0050)

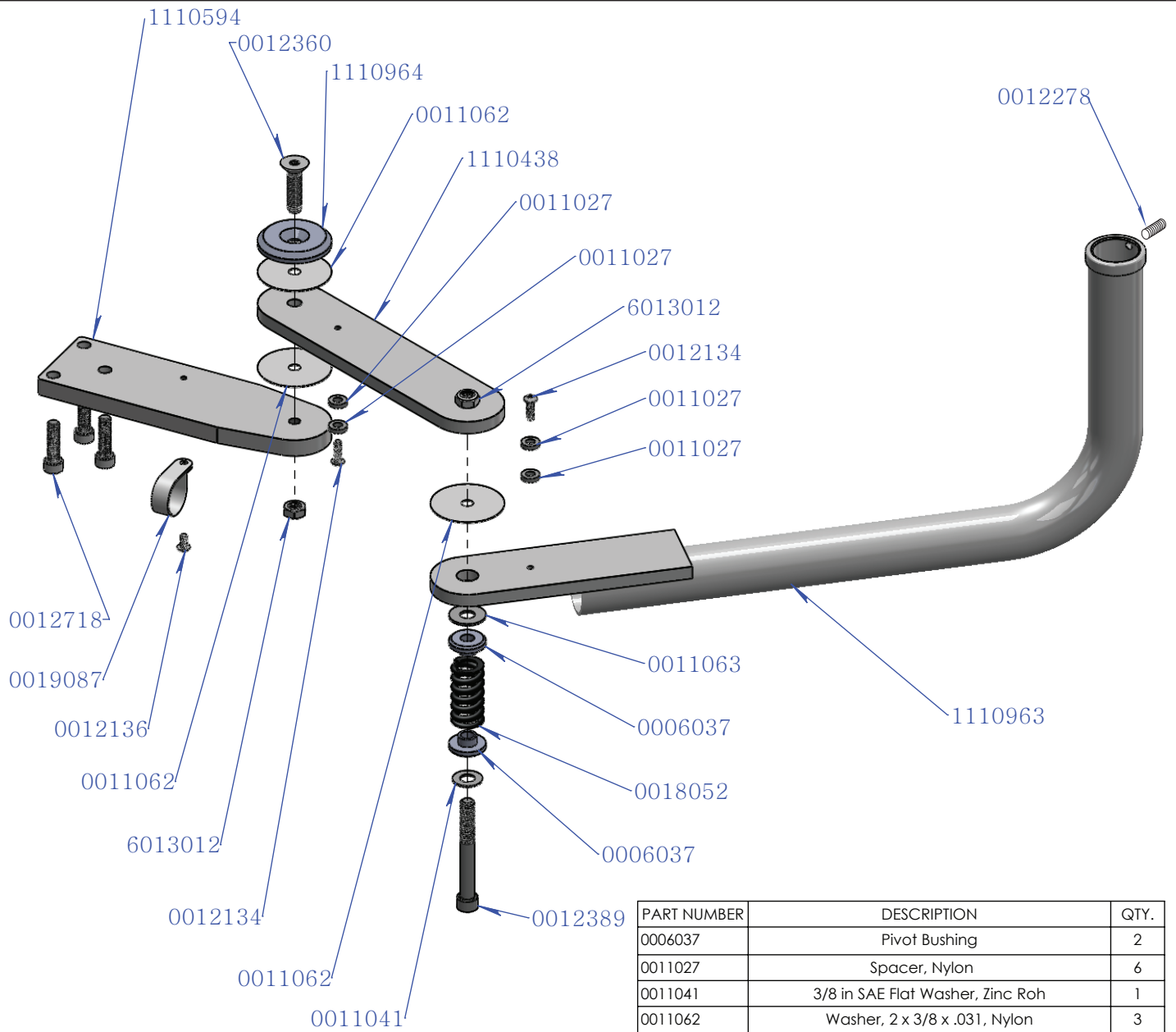


PART NUMBER	DESCRIPTION	QTY.
V1513G	Plastic Knob, Grey (only)	1
0010383	Bumper, Belmont	2
0011026	Washer, 1/4 ID x 9/16 OD x .02 THK	2
0011106	Spacer, 1/4"	1
0012033	Screw, 6-32 x .625, Button Socket, SS	4
0012128	10-32 x 5/16 socket set sup pt	1
0012144	10-32 x 3/8 socket cap screw 18-8	2
0012263	1/4-20 x 1 1/2 Button Socket Head Screw 18-8	1
0012278	1/4-20 x 3/16 Socket set screw, brass tip	1
0012615	Screw, 6-32 x 3/8" Button Socket Cap Screw, SS	5
P1053	Barb, 10-32 X 1/8	1
P1062	Sleeve, 1/4", Plastic (Not Shown above)	1
P1856	Plastic Elbow, 1/8" ID Barb, 10-32	2
P1055	Washer, Plastic, 10-32	3

PART NUMBER	DESCRIPTION	QTY.
0016290	Quick Disconnect, 1/4" ID	1
0020092	Solids Collector, 2 - 1/8" OD	1
0023616	Cover, Vacuum Arm	1
0023786	Base Plate, Vacuum Arm	1
FASA85B0	Assistant's Holder, Belmont	1
V1511G	Needle Control Valve, WITH Knob	1
1100130	Flow Restrictor	1
S1100	HVE, Universal W/QD	1
S1200	SE W/ QD	1
D3439	Syringe, Quick Clean, DCI	1
1110623	Bent Arm Weldment, Upper, Rear Swing Mount	1
1110793	Arm, Assistant Instrument Holder	1
1400017	Plug HVE Port, Central Vacuum	1
1400133	Locking CV Ass'y 5/8 Rear Drain	1
6013010	1/4-20 Nylon Insert Locknut	1

## BDS-0050 Rear Assistants Vac Pac (Upper Arm Assembly)

# INSTALLATION & ASSEMBLY (BELMONT BDS-0050)



PART NUMBER	DESCRIPTION	QTY.
0006037	Pivot Bushing	2
0011027	Spacer, Nylon	6
0011041	3/8 in SAE Flat Washer, Zinc Roh	1
0011062	Washer, 2 x 3/8 x .031, Nylon	3
0011063	Plastic Washer	1
0012134	10-32 x 5/8 Butt Soc Cap SS	2
0012136	Screw, 10-32 x 3/8" Button Socket Cap, SS	1
0012278	1/4-20 x 3/16 Socket set screw, brass tip	1
0012360	3/8-16 x 1 1/2 Flat Socket Cap Screw	1
0012389	3/8-16 x 3 Hex Cap Screw Zinc	1
0012718	M8 x 30mm, Socket Cap Screw, Painted	3
0016004	Sleeve, 1/4", Plastic	1
0019087	1" Heavy Duty Cable Clamp	1
1100130	Flow Restrictor	1
1110438	Swing Link	1
1110594	Mounting Bracket, BDS-0050	1
1110963	Bent Arm, Lower, Rear Swing	1
1110964	Collar, Pivot Screw	1
1400133	Locking CV Ass'y 5/8 Rear Drain	1
6013012	3/8-16 Thin Nylon Insert Locknut	2

## BDS-0050 Rear Assistants Vac Pac (Lower Arm Assembly)