



Electronic Service Manuals

This electronic document is provided as a service to our customers. We do not create the contents of the information contained in this document. Should you have detailed questions pertaining to the information contained in this document, you may contact Michco, or the manufacturer which provided the original information in this electronic deliverable. Michco's only part in this electronic deliverable was the electronic assembly process. By providing this manual on line we are not guaranteeing parts availability.

You may contact Michco through the following methods:

Phone (517) 484-9312 or (800) 331-3339

2011 N. High St. -- Lansing, Michigan -- 48906

Fax: (517) 484-9836

Email: CustServe@Michco.com

Web site: www.Michco.Com

Parts Web site: www.FloorMachineParts.Com

Order Parts on Line at:

www.FloorMachineParts.Com

Directly to Parts & Service:

By Email: **Shop@Michco.com**

By Fax: (517) 702-2041

By Voice: Use numbers above.

Serving the Cleaning Industry Since 1922

Notice: All copyrighted material remains property of original owners, all trademarks are property of respective owners. Manuals are subject to Manufacturer's reproduction limitations. Originals or reproductions were provided by manufacturers through a request. We make no warranty as to the correctness of information provided in this document and you assume all risk. By placing these manuals on line we are not declaring our corporation to be an manufacturer authorized dealer or provider, please check our web site for authorized manufacturers we represent.



THE NATIONAL SUPER SERVICE COMPANY

3115 FRENCHMENS ROAD, TOLEDO, OHIO 43607-2958
PHONE (419) 531-2121 FAX (419) 531-3761

IMPORTANT SAVE THESE INSTRUCTIONS

READ AND UNDERSTAND ALL INSTRUCTIONS
BEFORE OPERATING OR SERVICING MACHINE

THIS MACHINE IS INTENDED FOR COMMERCIAL USE ONLY



DESIGNER 16 - 20 WET/DRY VACUUM

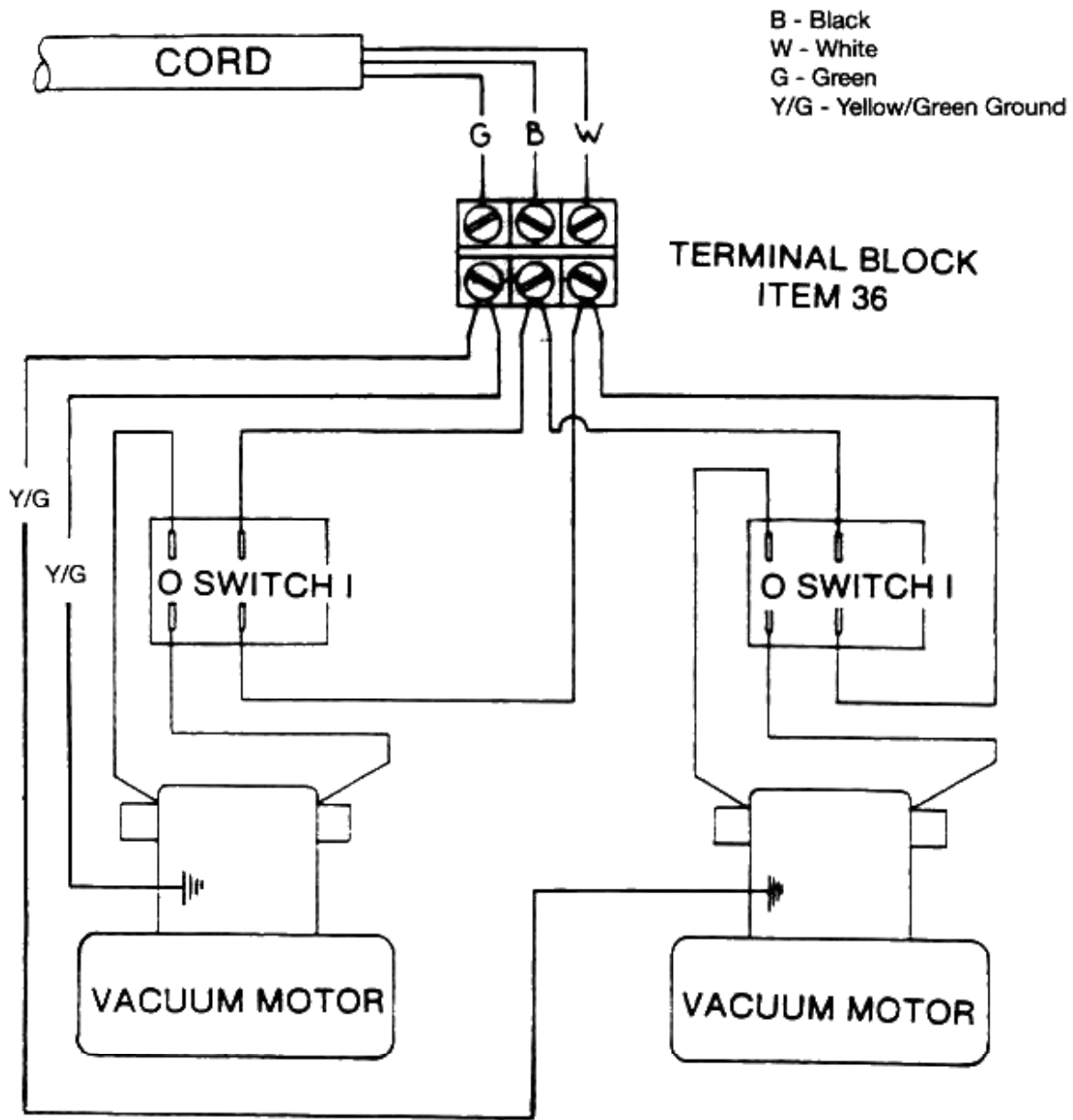


DANGER! Failure to Observe These Instructions Can Cause Fire, Electrical Burn, Shock or Electrocution To Machine Operator or Bystanders.

- When using an electrical appliance, basic precautions should always be followed, including the following:
- **NEVER** attempt to operate machine unless you have been trained in its operation.
- **NEVER** allow an untrained person to operate this machine.
- Use this machine **ONLY** as described in this manual.
- **NEVER** operate machine with a damaged, broken, cut, abraded, or taped cord or plug.
- **ALWAYS** connect machine to a properly grounded electrical outlet. See page 3 for grounding instructions and wiring diagram.
- **NEVER** leave machine unattended when plugged in. Unplug machine from electrical outlet when not in use and before attempting repairs or maintenance.
- **ALWAYS** turn machine OFF before unplugging from electrical outlet.
- **NEVER** operate machine in the presence of flammable or combustible liquids, such as gasoline, fumes or dusts.
- **NEVER** attempt to pick up flammable or combustible liquids, such as gasoline, fumes or dusts.
- **NEVER** handle machine, cord or plug with wet hands.
- **NEVER** drop or insert any object into any machine opening.
- **ALWAYS** keep face, fingers, hair or any body part, or loose clothing away from any machine opening or moving part.
- **NEVER** pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- **ALWAYS** use extreme care when cleaning on stairs or when machine is placed on stairs.
- **NEVER** operate machine if it is not working properly, if it has been dropped, damaged, exposed to weather, or dropped into water. Return machine to service center for examination and repair.
- **NEVER** operate machine with any air opening blocked. Keep all air openings free of dust, lint, hair and the like.
- **NEVER** operate machine without dustbag and/or filters in place.
- **DO NOT** pull or carry machine by electrical supply cord, use cord as a handle, close door on cord, pull cord around sharp edges or corners, expose to heated surfaces, or set heavy or sharp objects on cord.
- **NEVER** disconnect plug by pulling on cord. To disconnect from outlet, grasp the plug, not the cord.
- **DO NOT** allow to be used as a toy. Close attention is necessary when used by or near children.
- **DO NOT** expose to rain—STORE INDOORS.

SAVE THESE INSTRUCTIONS

DESIGNER 16 / 20 WIRING DIAGRAM



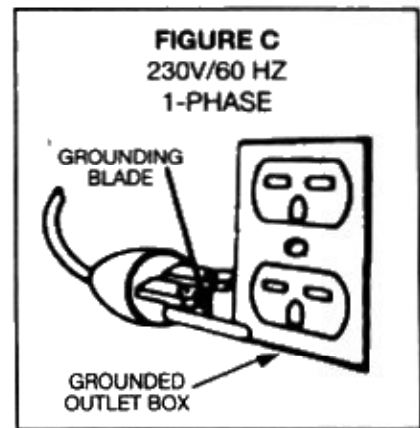
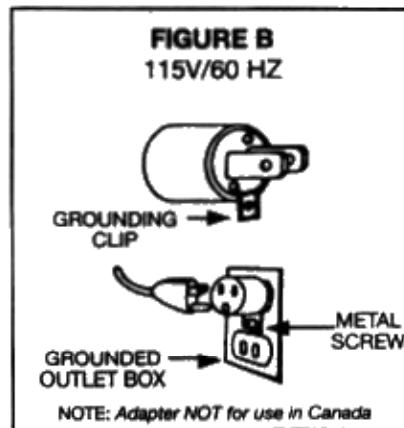
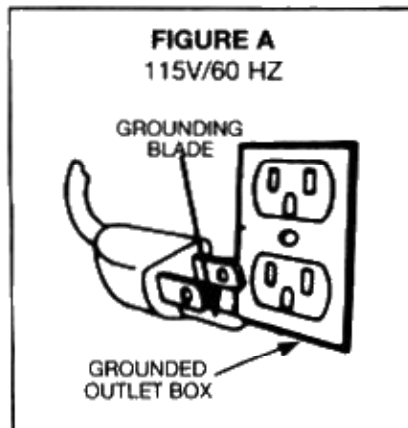
DANGER: DO NOT ATTEMPT MAINTENANCE OR REPAIRS BEFORE DISCONNECTING CORD FROM ELECTRICAL POWER SOURCE. READ ALL INSTRUCTIONS AND FOLLOW ALL ILLUSTRATIONS CAREFULLY.

DANGER:

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the machine - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

GROUNDING INSTRUCTIONS

This machine must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

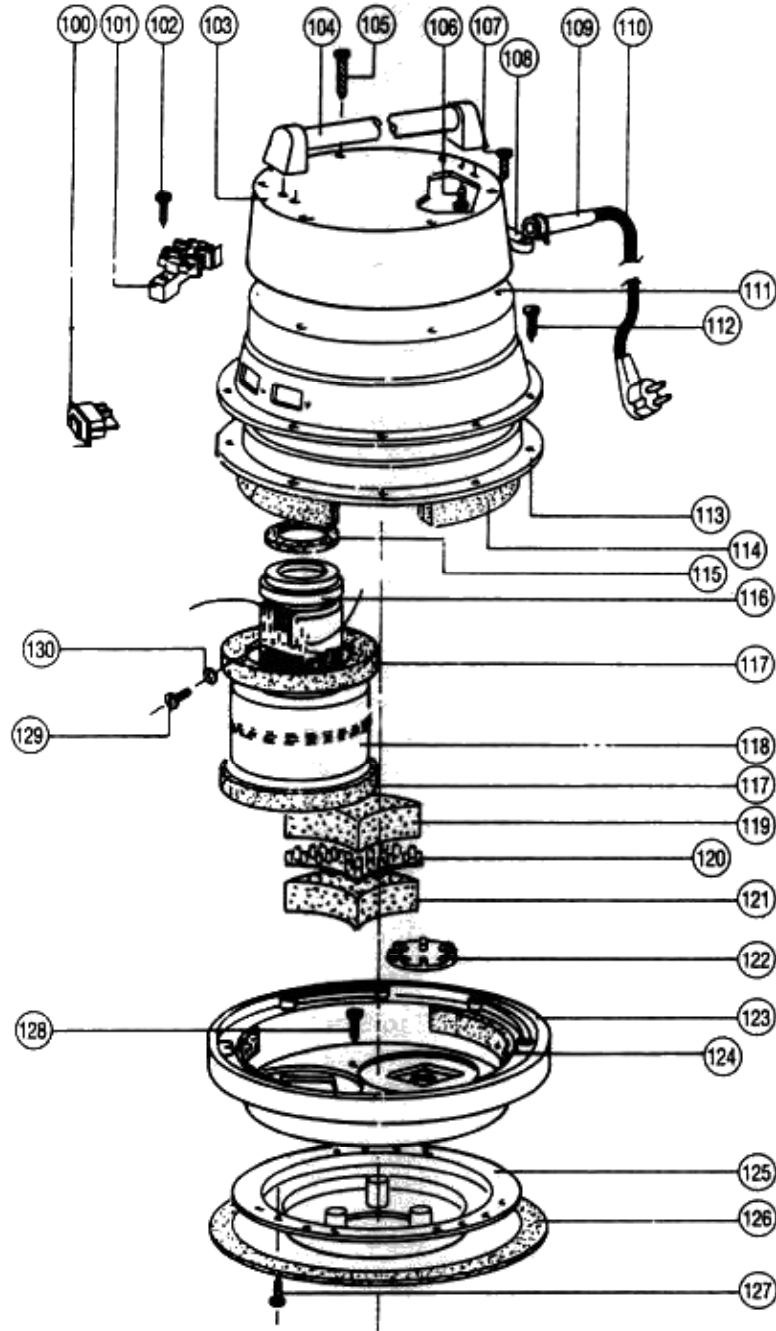


This machine is for use on a nominal 120-volt circuit, and has a grounding plug that looks like the plug illustrated in Fig. A. A temporary adapter that looks like the adapter illustrated in Fig. B may be used to connect this plug to a 2-pole receptacle as shown in Fig. B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a METAL screw.

**DESIGNER 16 / 20 WET - DRY VACUUM
POWERHEAD ASSEMBLY
(Square Container Only)**

<u>ITEM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
100	57-9-244-1	On - Off Switch, Lighted	1
101	57-9-425-1	Main Terminal Block	1
102	57-9-145-1	5.0 x 30 Self Tap Screw	1
103	57-9-226-1	Motor Top Cover	1
104	57-9-248-1	Lift Handle Assembly	1
105	57-9-246-1	5.2 x 50 Self Tap Screw	2
106	57-9-144-1	5.0 x 20 Self Tap Screw	2
107	57-9-259-1	4.3 x 22 Self Tap Screw	4
108	57-9-104-1	Cord Clamp	1
109	57-9-102-1	Cord Strain Relief, rubber	1
110	57-9-400-1	Power Cord, 50ft (15.2m), 16-3, 120 Volt	1
111	57-9-426-1	Motor Lower Cover	1
112	57-9-262-1	5.0 x 30 Self Tap Screw	8
113	57-9-427-1	Holding Ring (2 motor)	1
114	57-9-230-1	Foam Filter	3
115	57-9-203-1	Top Motor Gasket	2
116	57-9-401-1	Motor Spacing Ring	2
117	57-9-108-1	Motor Seal Gasket	2
118	02-9-643-9	Vacuum Motor, 120 Volt	2
—	02-9-645-9	Vacuum Motor, 240 Volt	2
119	57-9-231-1	Upper Triangular Spacer, Foam	3
120	57-9-232-1	Plastic Spacer	3
121	57-9-233-1	Lower Triangular Spacer, Foam	3
122	57-9-234-1	Automatic Valve (Airflow)	1
123	57-9-428-1	Lid	1
124	57-9-236-1	Filter Strip	3
125	57-9-238-1	Lid Pan	1
126	57-9-429-1	Lid Gasket	1
127	57-9-105-1	5.0 x 14 Self Tap Screw	6
128	57-9-144-1	5.0 x 20 Self Tap Screw	3
129	57-9-255-1	4.0 x 8.0 UNI Screw	1
130	57-9-265-1	Keps Nut	1

**DESIGNER 16 / 20 WET - DRY VACUUM
POWERHEAD ASSEMBLY
(Square Container Only)**



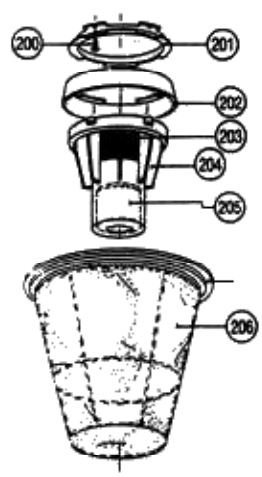
**DESIGNER 16 / 20 WET - DRY VACUUM
FILTER ASSEMBLY
(Square Container Only)**

<u>ITEM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
200	57-9-144-1	5.0 X 20 Self Tap Screw	4
201	57-9-525-1	Float Stand Ring	1
202	57-9-526-1	Float Stand Collar	1
203	57-9-527-1	Float Screen	1
204	57-9-218-1	Float Housing	1
205	57-9-219-1	Float	1
206	57-9-528-1	Synthetic Filter Assembly Complete	1

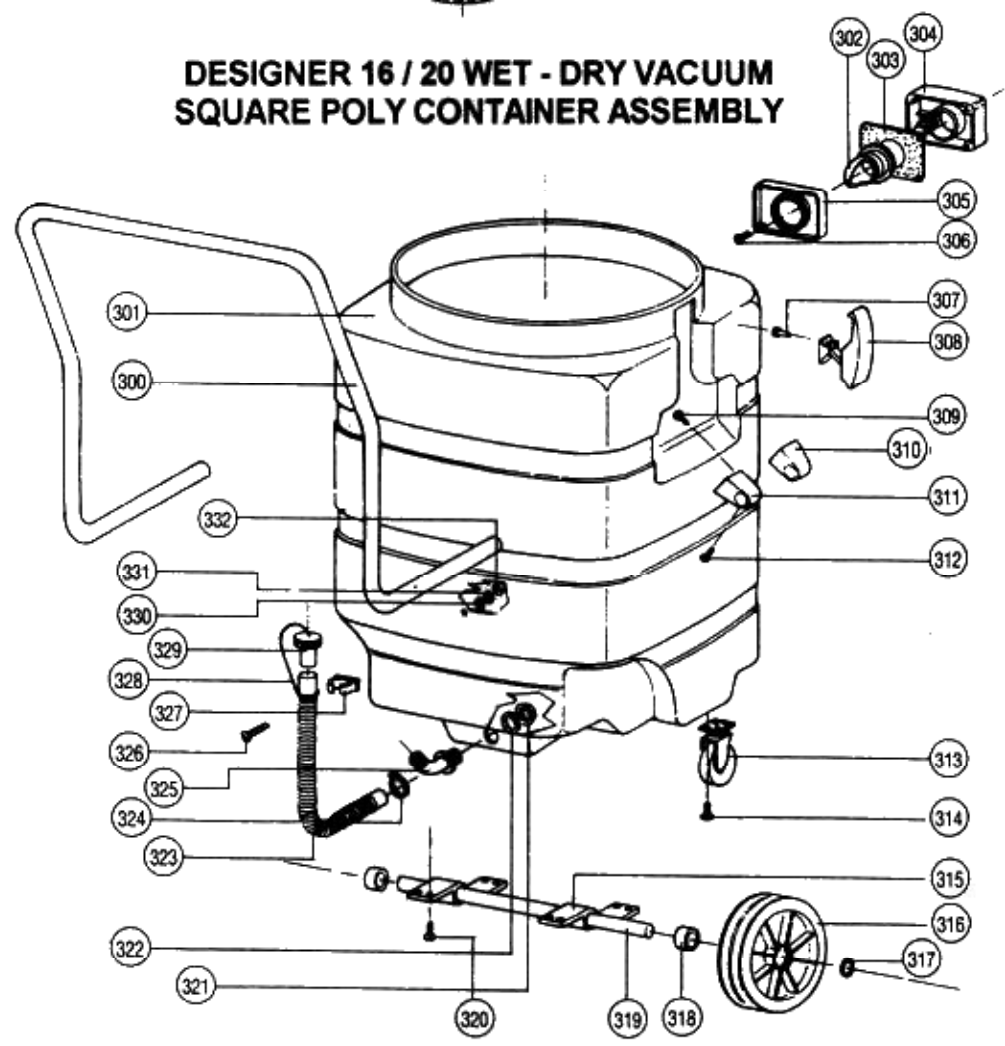
**DESIGNER 16 ONLY WET - DRY VACUUM
SQUARE POLY CONTAINER ASSEMBLY**

<u>ITEM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
300	57-9-625-1	Transport Handle	1
301	57-9-626-1	Poly Container (Square)	1
302	57-9-627-1	Intake Deflector	1
303	57-9-602-1	Intake Gasket	1
304	57-9-603-1	Intake (Plastic)	1
305	57-9-628-1	Intake Support	1
306	57-9-145-1	5.0 x 30 Self Tap Screw	4
307	57-9-267-1	Lid Clamp Rivet	4
308	57-9-142-1	Lid Clamp	2
309	57-9-145-1	5.0 x 30 Self Tap Screw	8
310	57-9-146-1	Transport Handle Bracket	2
311	57-9-629-1	Passing Handle Bracket	2
312	57-9-136-1	5.0 x 11 Pop Rivet (Handle Bracket)	2
313	57-9-630-1	Swivel Caster	2
314	57-9-258-1	4.0 x 15 Self Tap Screw (Caster)	8
315	57-9-633-1	Container Support Bracket	2
316	57-9-631-1	Rear Wheel	2
317	57-9-635-1	Wheel Snap Ring	2
318	57-9-634-1	Wheel Spacer	2
319	57-9-632-1	Wheel Axle	1
320	57-9-144-1	5.0 x 20 Self Tap Screw	8
321	57-9-638-1	Drain Hose Connector	1
322	57-9-637-1	Drain Seal Gasket	1
323	57-9-639-1	Drain Hose	1
324	57-9-640-1	Drain Hose Clamp	1
325	57-9-636-1	Drain Hose Barb	1
326	57-9-257-1	5.0 x 25 UNF Screw	1
327	57-9-641-1	Hose Clamp Mount Ring	1
328	57-9-642-1	Drain Hose Plug Strap	1
329	57-9-643-1	Drain Hose Plug	1
330	57-9-320-1	Plastic Washer	1
331	57-9-129-1	Flat Washer	1
332	57-9-264-1	Nut	1

**DESIGNER 16 / 20 WET - DRY VACUUM
 FILTER ASSEMBLY
 (Square Container Only)**



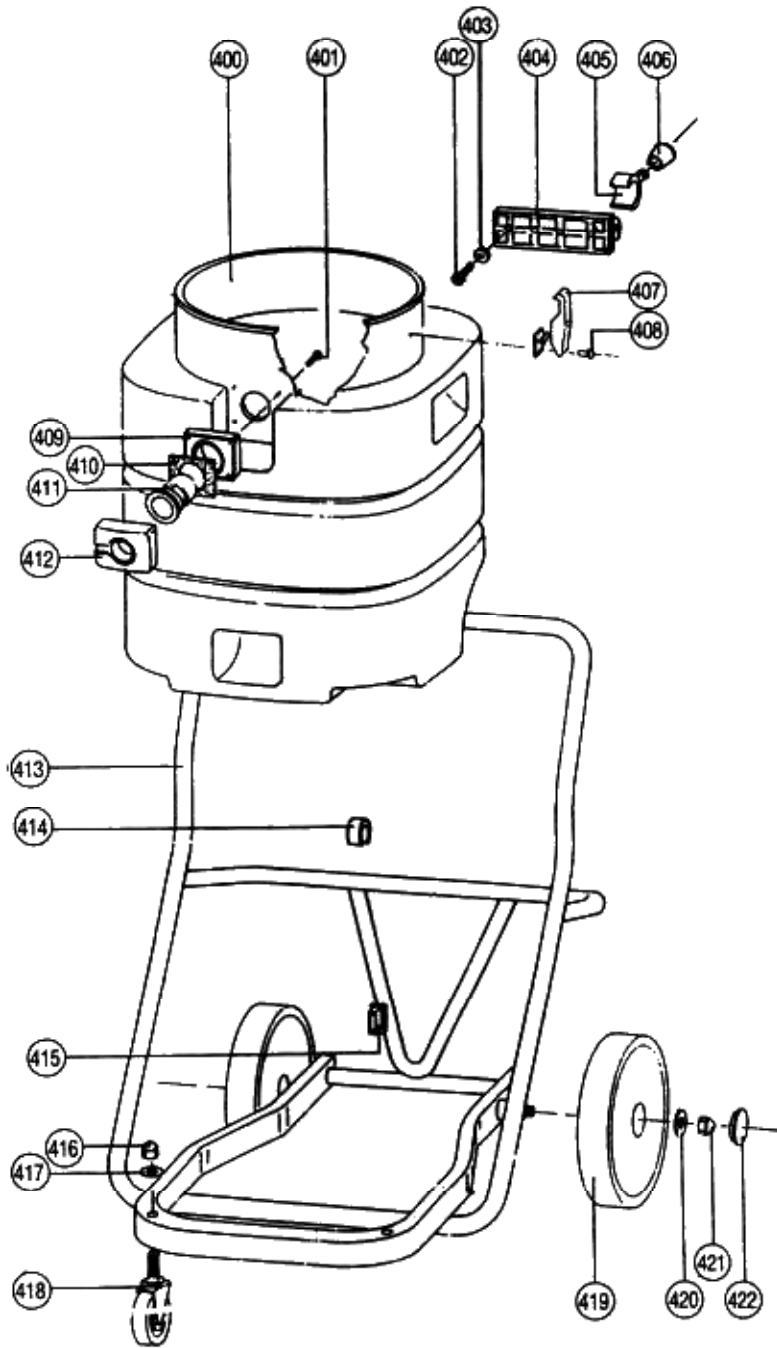
**DESIGNER 16 / 20 WET - DRY VACUUM
 SQUARE POLY CONTAINER ASSEMBLY**



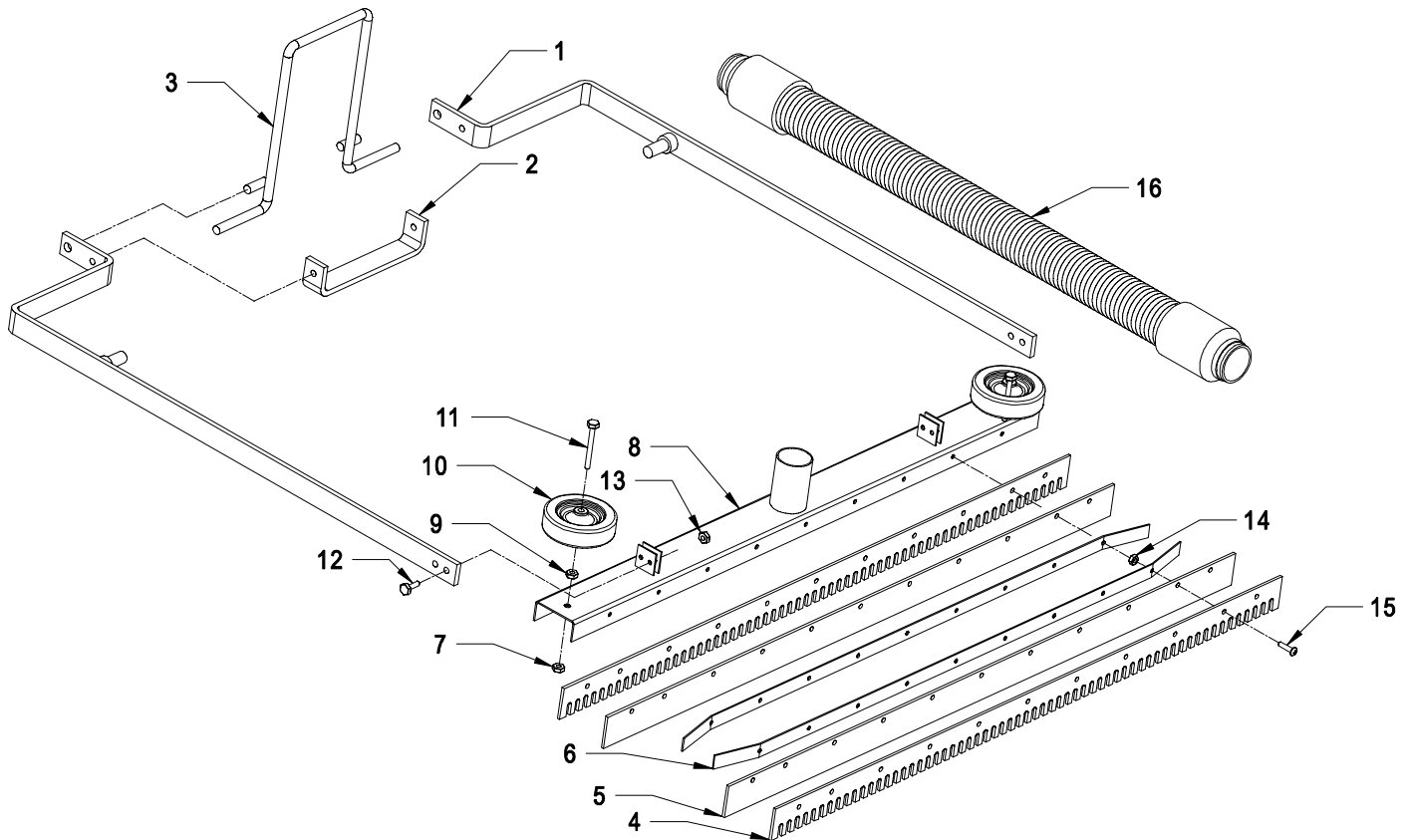
**DESIGNER 20 ONLY WET - DRY VACUUM
SQUARE POLY CONTAINER ASSEMBLY**

<u>ITEM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
400	57-9-650-1	Poly Container (Square)	1
401	57-9-263-1	5.0 x 35 Self Tap Screw	4
402	57-9-261-1	5.0 x 25 Self Tap Screw	4
403	57-9-266-1	Plastic Washer	4
404	57-9-651-1	Tank Hinge Plate	1
405	57-9-652-1	Tank Hinge Clamp	2
406	57-9-653-1	Rubber Stop (Hinge)	2
407	57-9-253-1	Lid Clamp	2
408	57-9-267-1	Lid Clamp Rivet	4
409	57-9-603-1	Intake (Plastic)	1
410	57-9-627-1	Intake Deflector	1
411	57-9-602-1	Intake Gasket	1
412	57-9-655-1	Intake Support	1
413	57-9-656-1	Tip Handle and Base	1
414	57-9-654-1	Spacer Ring	2
415	57-9-305-1	Plastic Cap	1
416	57-9-287-1	Cap Nut (Caster)	2
417	57-9-308-1	Flat Washer, M10	2
418	57-9-286-1	Swivel Caster, Threaded Stem	2
419	57-9-657-1	Rear Wheel	2
420	57-9-306-1	Wheel Washer, Flat, 10 x 30	2
421	57-9-287-1	Cap Nut (Wheel)	2
422	57-9-658-1	Wheel Cap	2

**DESIGNER 20 ONLY WET - DRY VACUUM
SQUARE POLY CONTAINER ASSEMBLY**



NSS FRONT MOUNT SQUEEGEE



<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
	5795341	FRONT MOUNT SQUEEGEE WITH MOUNTING BRACKET ASSEMBLY	1
1	5795411	LIFT ARM	2
2	5795421	CROSS BAR	1
3	5795431	LATCH	1
	5795351	FRONT MOUNT SQUEEGEE ASSEMBLY	1
4	5795361	BLADE – SLOTTED	2
5	5795371	BLADE – SOLID	2
6	5795381	BLADE – SUPPORT	2
7	9120900	1/4-20 HEX NUT WITH NYLOK INSERT	2
8	5795391	HOUSING	1
9	9120920	1/4-20 HEX	2
10	5795401	WHEEL	2
11	9121145	1/4-20 X 2	2
12	9121270	1/4-20 X 1	6
13	9120900	1/4-20 HEX NUT WITH NYLOK INSERT	6
14	9120350	HEX NUT WITH NYLOK INSERT	22
15	9120480	10-24 X 3/4 ROUND HEAD PHILLIPS SCREW	22
16	5795441	HOSE	1



This page intentionally blank.



THE NATIONAL SUPER SERVICE COMPANY

3115 FRENCHMENS ROAD, TOLEDO, OHIO 43607-2958

PHONE (419) 531-2121 FAX (419) 531-3761