

Machine Assembly Parts

Figure 1 High Speed Handle Assembly

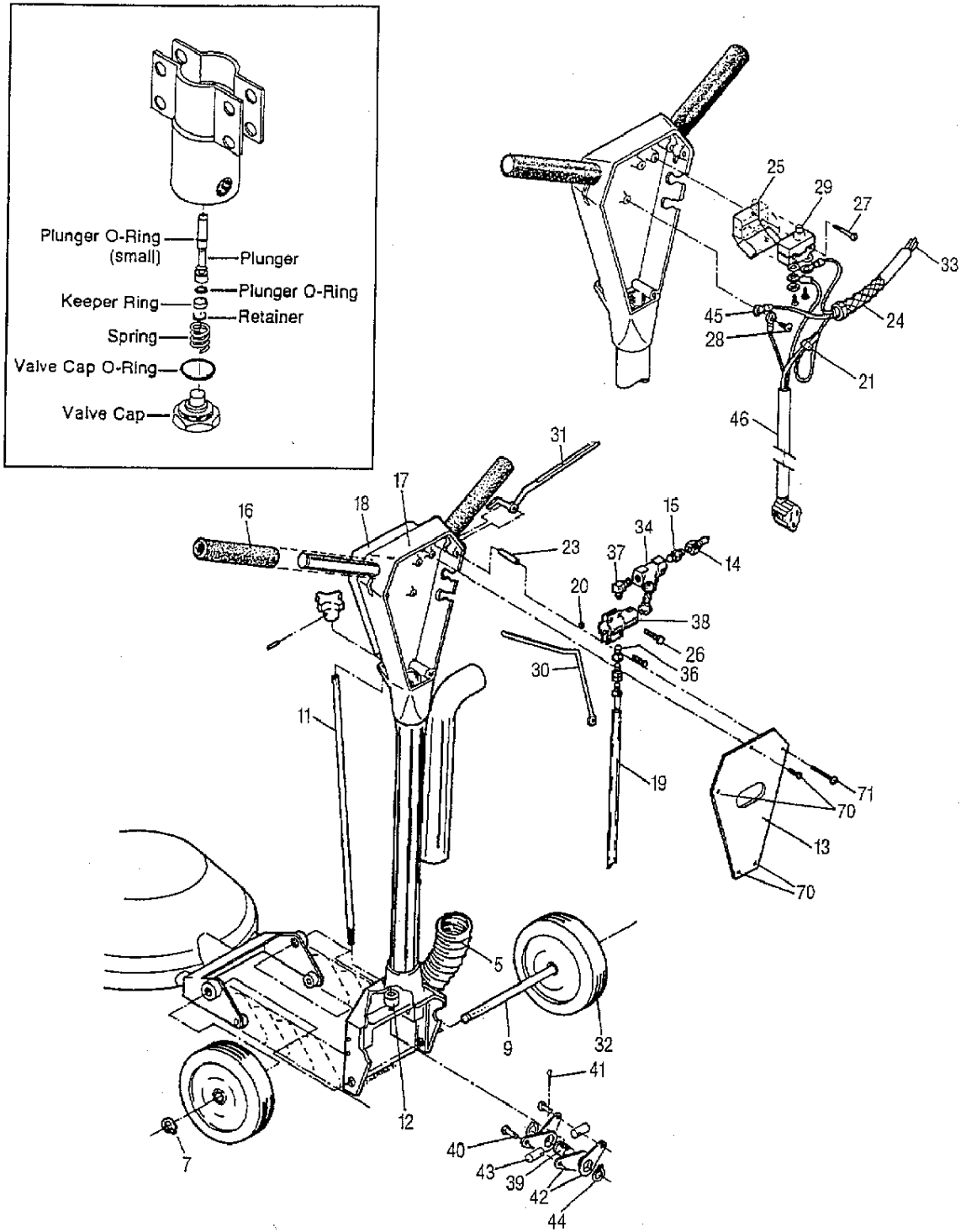
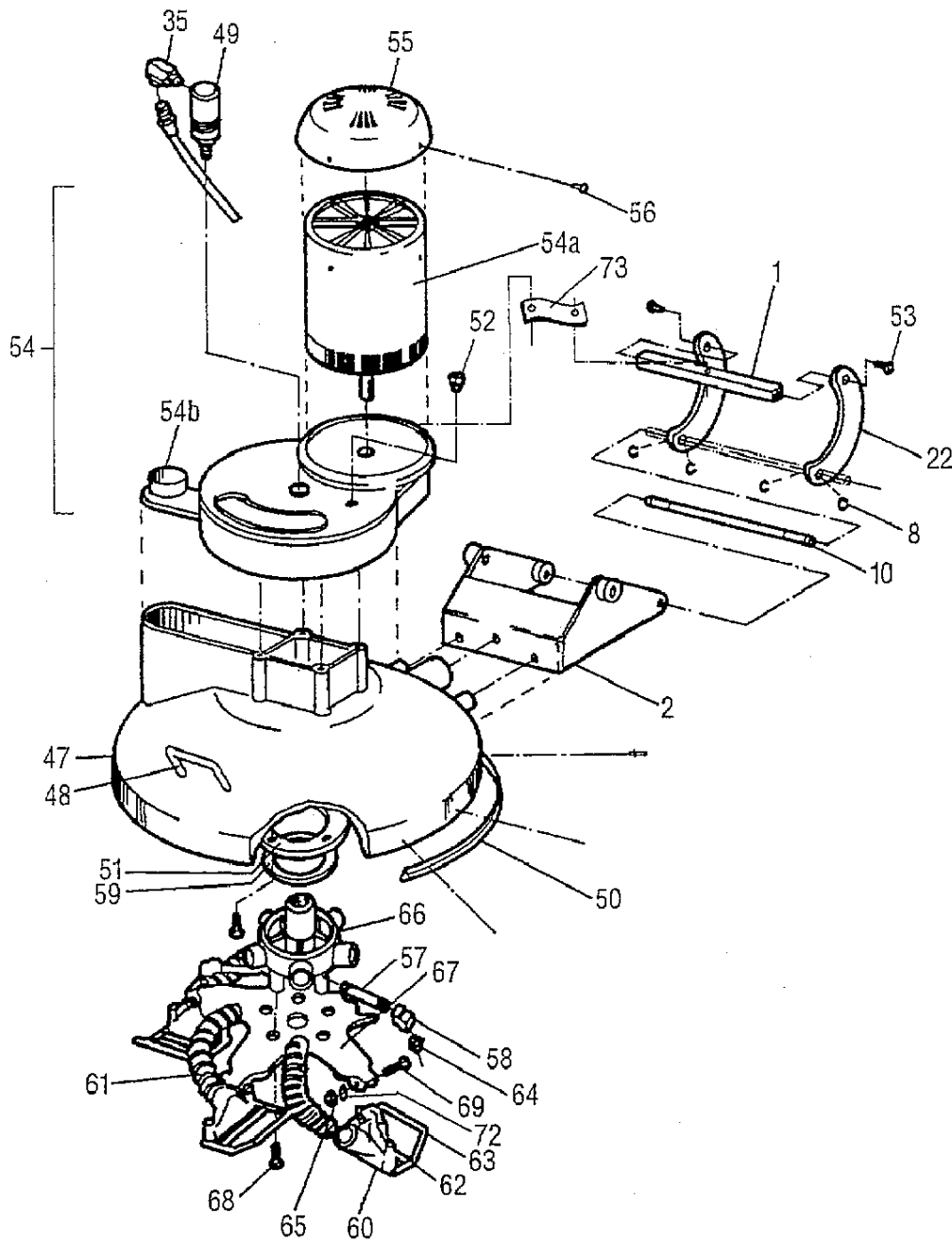


Figure 2 High Speed Base Assembly



RX-20/CMX-20**Page 13****RX-20 High Speed Parts List**

ITEM	PART NO	DESCRIPTION	QTY
1	000-015-066	Bracket, RX-20 Hood Wrinkle Black	1
2	000-015-139	Bracket, Hi Speed RX Handle Brace	1
5	000-068-040	Hose, Base Out - Manifold	1
7	000-139-009	Ring, Snap Ring (E-Clip) x 1/2"	2
8	000-139-010	Ring, Snap Ring (E-Clip) x 5/16"	4
9	000-141-004	Axle, Hi Speed RX Wheel	1
10	000-141-005	Rod, Hi Speed RX-20 Handle Arc	1
11	000-141-006	Rod Assy, Hi Speed RX Handle Adjusting	1
12	000-020-004	Collar, 3/8" Set	1
13	000-041-013	Cover, Handle Access	1
14	000-052-050	Quick Connect, 440 Male with Viton	1
15	000-052-071	Nipple, 1/4" Brass Hex	1
16	000-061-001	Handle, Foam Grip	2
17	000-061-017	Handle, Hi Speed RX-20	1
18	000-081-001	Label, RX-20 Machine (3 pcs set)	1
19	000-068-175	Hose, Solution Valve to Rotary Union	1
20	000-094-010	Nut 1/4"-20 s/s Hex	1
21	000-094-021	Nut, Wire - Yellow	1
22	000-107-096	Handle Arc	2
23	000-107-103	Trigger Pivot	1
24	000-108-012	Protector, Power Cord Relief Grip	1
25	000-108-014	Shield, RX-20 Micro Switch	1
26	000-143-002	Screw, 1/4"-20 x 1" HHC s/s	3
27	000-143-048	Screw, 6-32 x 1" Rnd HD Mach s/s	2
28	000-143-336	Screw, 10-32 x 1/4" s/s Pan Head	1
29	000-157-032	Switch, Micro	1
30	000-167-009	Trigger, o/s RX-20 Brass Solution Valve	1
31	000-167-010	Trigger, RX-20 Power	1
32	000-177-001	Wheel, 8" Hi Speed RX-20	2
33	000-178-004	Cord, 14/3 x 50' Gray - Power	1
34	000-049-033	Filter, 3/8" Inline Y	1
35	000-052-001	2M - 2UFS	1

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RX-20/CMX-20

ITEM	PART NO	DESCRIPTION	QTY
36	000-052-059	Bushing, 1/4 M x 1/8 F Brass	1
37	000-052-301	Elbow, 1/4" Male x 1/4" Male	1
38	000-169-058	Valve, s/s HM Solution	1
39	000-094-030	Nut, Adjusting	1
40	000-103-012	Pin, 1/4 x 7/8" Clevis	2
41	000-103-013	Pin, 3/32 x 1/2" s/s Cotter - RX	2
42	000-107-097	Link	4
43	000-107-101	Plunger	2
44	000-139-006	Ring, 5/8" Snap	2
45	000-037-016	Terminal, #10 Ring - 16 AWG	1
46	000-178-039	Cord, 14/3 x 6' Gray	1
47	000-006-009	Base, Hi Speed RX-201	
48	000-061-027	Handle, RX Express Base - Lift	1
49	000-052-276	Rotary Union, 1/8" NPT	1
50	000-078-108	Kit, Roto Shroud Bumper and Rivet	1
51	000-105-008	Plate, Cast RX-20 Base - Seal	1
52	000-106-014	Plug, RX-20 Gearbox Vent	1
53	000-143-166	Screw, 10-24 x 3/8" s/s BTN HD Cap	2
54	604-052-005	Hi Spd RX-20 Motor/Gearbox Assy	1
54A	604-052-006	Hi Spd RX-20 Elect Motor Assy	1
54B	000-059-001	Gearbox Complete, Spur	1
54C	604-052-010	Elect. Motor Assy, WDR RX	1
55	000-041-123	Cover, 1/2 HP TEFC Motor	1
56	000-143-096	Screw, 3/8 16 x 3/4" s/s BTN HD	3
57	000-052-080	Nipple, 1/8" x 4" Brass	5
58	000-052-089	Elbow, 1/8" Brass Female	5
59	000-057-047	Gasket, RX-20 Felt Hub	1
60	000-064-012	Head, New RX Skid Assy Complete	5
61	000-068-174	Hose, Vac Hub/Skid	1
62	000-064-011	Head, New RX Cast Skid-Weldment	1
63	000-107-095	Skid Bottom, New Style RX Shoe	1
64	000-076-037	Jet, H 1/8VV 80015 SS-STD	5
Optional:	000-076-052	Jet, 1) 2 Piece Set Twist Out	5
	000-076-058	Jet, 1) 2 Piece Brass #8001	5

*RX-20/CMX-20**Page 15*

ITEM	PART NO	DESCRIPTION	QTY
65	000-094-009	Nut, 5/16-18 s/s Nylock Half	5
66	000-107-0201	Hub with Ring, Double Lead Thread	1
67	000-107-089	S/S Heat Treated Star	1
68	000-143-012	Screw, 5/16-18 x 3/4" s/s HHC	5
69	000-143-162	Screw, 5/16 x 1" Stripper - 1/4-20 s/s	5
70	000-143-166	Screw, 10-24 x 3/8" s/s BTN HD Cap	4
71	000-143-065	Screw, 10-24 x 1 3/4" s/s BTN HD Cap	5
72	000-174-049	Washer, 5/16" s/s Flat	3
73	000-015-009	Bracket, Hi Speed RX Handle Brace	1

Not Shown:

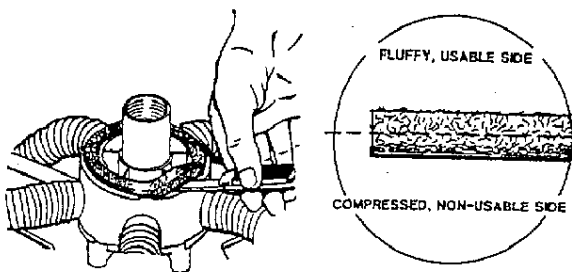
000-094-036	Nut, NPT Pipe Plastic Used w/ Item No. 24	1
000-143-096	Screw, - 16 x 1" HHC s/s Used with Item No. 54	3
000-174-055	Washer, Latch Pivot Used with Item No. 54	3
000-174-057	Washer, 3/8" s/s Lock Used with Item No. 54	3

Repair

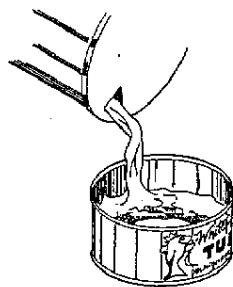
Removal of Components

Felt Vacuum Seal Replacement:

A worn or unlubricated seal will not form a proper seal. Lack of a proper seal will impair the vacuuming capabilities of the unit and therefore leave behind more water in the carpet than is desirable.



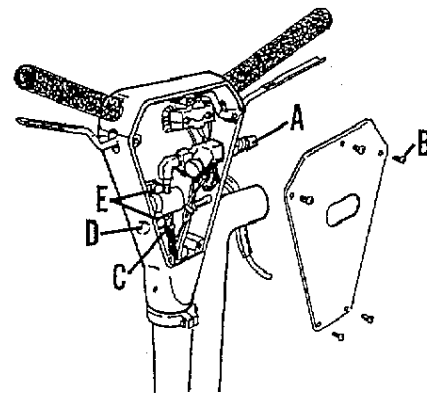
First, remove the vacuum head assembly as previously described. Using a pocket knife, carefully pry the seal up and lift it out. If the seal appears worn or glazed so that it will not lubricate well, try turning it over. If that does not work, or if it is damaged, replace it with a new one. We recommend changing the felt seal after 10 hours of use. Replace it with a spare, soaked seal. Press the seal in place and saturate it with a quality 30 weight SAE motor oil. Always place the flattened, used seal in an oil bath to rejuvenate.



NOTE: A tuna fish can is the right size and shape and does not require a large amount of oil.) This seal and its condition play an important part in the optimum performance of your RX-20.

High Pressure Valve Assembly:

The valve assembly's moving parts will eventually wear out its time. Its repair or replacement is a relatively simple operation.



1. Remove the 440 male quick connect (A) with a wrench.
2. Remove the five Allen head screws (B) in the back plate on the handle and lift the back panel off.
3. Disconnect the stainless steel hose (C) from the bottom of the valve assembly.
4. Remove the bolt (D) holding the trigger.
5. Remove the two bolts (E) holding the valve assembly in the handle and pull out.
6. The valve may now be rebuilt or replaced.

◆ CAUTION ◆

If the valve has been frozen, inspect it for leakage before reinstalling the back plate.

Troubleshooting

No.	Problem/Possible Cause	Solution
1.0	Low Vacuum Flow at the Cleaning Heads	
1.1	Hub not sealing properly.	Replace felt seal with a lubricated one.
1.2	Restricted air flow.	Remove jets and clear them of debris.
1.3	Low vacuum flow from power source.	Refer to Troubleshooting section of equipment manual.
No.	Problem/Possible Cause	Solution
2.0	Low Water Flow at Cleaning Heads (indicated by irregular Water Temperature)	
2.1	Restricted jets.	Remove jets and clear them of debris.
2.2	Clogged water strainer.	Remove water strainer and clean.
2.3	Kinked or clogged solution hose.	Remove hose. Repair or replace.
2.4	Cleaning hub not properly threaded to shaft.	Remove cleaning hub from shaft. Clean and rethread onto shaft.
No.	Problem/Possible Cause	Solution
3.0	Water Leak at Rotary Union	
3.1	Foreign matter in rotary union seal.	Dismantle rotary union. Clean. Reassemble and install.
No.	Problem/Possible Cause	Solution
4.0	Water Leak at Valve	
4.1	Ruptured plunger or valve o-ring.	Repair or replace damaged plunger, o-ring, seal. Check for freeze damage.

No.	Problem/Possible Cause	Solution
5.0	Loss of Oil from Gearbox.	
5.1	Loose or ruptured oil seal. gearbox with oil.	Replace damaged oil seal. Refill
No.	Problem/Possible Cause	Solution
6.0	No Power.	
6.1	RX-20 wiring or power source. possible wiring or motor problems.	Have an electrician inspect unit for
6.2	Overload power source	Locate an unused power source.
6.3	Gearbox	Repair or replace gearbox
No.	Problem/Possible Cause	Solution
7.0	Head wobbles during operation.	
7.1	One leg of star bent.	Straighten star.

Limited Warranty Plan

HydraMaster warrants Rotary Extractor machines of its manufacture to be free from defects in material and workmanship if properly installed, maintained, and operated under normal conditions with competent supervision. No person, agent, representative or dealer is authorized to give any warranties on behalf of HydraMaster, nor to assume for HydraMaster any other liability in connection with any HydraMaster products. This warranty shall extend to the original purchaser of said equipment for the periods listed below from date of installation. If repairs or replacements are made by the Purchaser without HydraMaster's written consent, HydraMaster's warranty shall cease to be in effect.

Machinery, equipment and accessories furnished by HydraMaster, but manufactured by others, are warranted only to the extent of the original manufacturer's warranty to HydraMaster unless otherwise specified in the listing below.

HydraMaster agrees, at its option, to repair at the point of shipment, or to replace without charge, any parts or parts of products of HydraMaster's manufacture, which within the specified warranty period shall be proved to HydraMaster's satisfaction to have been defective when shipped, provided the purchaser promptly notifies HydraMaster, in writing, of such alleged defect. HydraMaster will pay all freight and transportation charges within the United States, via normal ground shipping means, for replacement of parts covered under this warranty.

This warranty covers parts, as specified, and does not cover labor which may be necessary in completing repairs. HydraMaster's liability to Purchaser, whether in contract or in tort arising out of warranties, representation, instructions, or defects from any cause shall be limited to repairing or replacing the defective part or parts. To qualify for warranty coverage, defective parts must be returned to HydraMaster within 30 days. No warranty liability whatsoever shall attach to HydraMaster unless and until HydraMaster has received payment in full for the warranted machine or part.

Except as stated in this section and in the proceeding section and except as to title, there are no guarantees or warranties of merchantability, fitness, performance or otherwise, express, implied or statutory, and HydraMaster shall have no liability for consequential, incidental or other damages howsoever caused.

(continued on the following page...)

All components not specifically referenced in the schedule below are covered under this warranty for a period of one (1) year, excepting those parts which are considered, by HydraMaster, to be expendable in normal use, including but not limited to paint, labels and other cosmetic parts or features.

Freezing of any water or chemical related component will VOID all warranties on water or chemical related components, internal or external, of this equipment.

Deposits and buildup in the water or chemical systems due to hardness in the water used or chemicals which results in deposits, will VOID all warranties on affected components.

All recommended maintenance must be performed by competent service personnel.

Records of periodic maintenance must be kept and copies may be required to be furnished to HydraMaster before this warranty is honored.

Coverage Schedule

Frame, Handle, Body	3 years
Gearbox	1 year
Motor	1 year
Valves, Filters, Hoses	1 year

For service, contact the distributor where the machine was purchased or call our Customer Service Department:

Monday through Friday • 8:00 am To 5:00 pm PST

Parts: (425) 775-7276

Service: (425) 775-7275

Parts and Service FAX: (800) 426-4225



PST



ROCK MT.



CENTRAL



EASTERN



11015 47th Avenue W. • Mukilteo, WA 98275

CMX-20 Parts List

<i>Part No.</i>	<i>Description</i>	<i>Retail Price</i>
000-015-066	Bracket, RX-20 Hood Wrinkle Black.....	\$ 9.95
000-015-139	Bracket, Hi Speed RX Handle Brace	92.95
000-068-040	Hose, Base Out - Manifold.....	23.95
000-139-009	Ring, Snap Ring (E-Clip) x 1/2"	1.19
000-139-010	Ring, Snap Ring (E-Clip) x 5/16"	0.49
000-141-004	Axle, Hi Speed RX Wheel	13.95
000-141-005	Rod, Hi Speed RX-20 Handle Arc	17.95
000-141-006	Rod Assy, Hi Speed RX Handle Adjusting.....	28.95
000-020-004	Collar, 3/8" Set.....	1.49
000-041-013	Cover, Handle Access	19.95
000-052-050	Quick Connect, 440 Male with Viton	6.95
000-052-071	Nipple, 1/4 Brass Hex	0.89
000-061-001	Handle, Foam Grip.....	2.95
000-061-017	Handle, Hi Speed RX-20.....	264.95
000-081-001	Label, RX-20 Machine (3 pc set)	17.95
000-068-175	Hose, Solution Valve to Rotary Union	37.95
000-094-010	Nut 1/4-20 s/s Hex.....	0.14
000-094-021	Nut, Wire - Yellow.....	0.49
000-107-096	Handle Arc	13.95
000-107-103	Trigger Pivot.....	2.95
000-108-012	Protector, Power Cord Relief Grip	2.49
000-108-014	Shield, RX-20 Micro Switch.....	0.89
000-143-002	Screw, 1/4-20 x 1" HHC s/s.....	0.49
000-143-048	Screw, 6-32 x 1" Rnd HD Mach s/s	1.19
000-143-336	Screw, 10-32 x 1/4" s/s Pan Head	0.13
000-157-032	Switch, Micro	13.95
000-167-009	Trigger, o/s RX-20 Brass Solution Valve.....	12.95
000-167-010	Trigger, RX-20 Power	11.95
000-177-001	Wheel, 8" Hi Speed RX-20	13.95
000-178-004	Cord, 14/3 x 50' Gray - Power	29.95
000-049-033	Filter, 3/8" Inline Y	29.95
000-052-001	2M - 2UFS	1.69
000-052-059	Bushing, 1/4 M x 1/8 F Brass.....	0.49
000-052-301	Elbow, 1/4" Male x 1/4" Male.....	5.69
000-169-058	Valve, s/s HM Solution	82.95
000-094-030	Nut, Adjusting	4.95
000-103-012	Pin, 1/4 x 7/8" Clevis.....	0.79
000-103-013	Pin, 3/32 x 1/2" s/s Cotter - RX	0.13
000-107-097	Link	2.29
000-107-101	Plunger	4.49

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<i>Part No.</i>	<i>Description</i>	<i>Retail Price</i>
000-139-006	Ring, 5/8" Snap	\$ 0.17
000-037-016	Terminal, #10 Ring - 16 AWG	0.39
000-178-039	Cord, 14/3 x 6' Gray	11.49
000-006-009	Base, Hi Speed RX-20	279.95
000-052-294	Rotary Union, Brass RX-20.....	109.95
000-078-108	Kit, Roto Shroud Bumper and Rivet	10.95
000-105-008	Plate, Cast RX-20 Base - Seal	10.95
000-106-014	Plug, RX-20 Gearbox Vent	2.69
604-052-005	Hi Spd RX-20 Motor/Gearbox Assy	869.95
604-052-006	Hi Spd RX-20 Elect Motor Assy	329.95
000-059-001	Gearbox Complete, Spur	495.00
000-041-123	Cover, 1/2 HP TEFC Motor	18.95
000-143-096	Screw, 3/8 16 x 3/4" s/s BTN HD	0.69
000-052-080	Nipple, 1/8" x 4" Brass	3.95
000-052-089	Elbow, 1/8" Brass Female	1.19
000-057-047	Gasket, RX-20 Felt Hub	2.39
000-064-012	Head, New RX Skid Assembly Complete	59.95
000-068-174	Hose, Vac Hub/Skid.....	4.95
000-064-011	Head, New RX Cast Skid-Weldment	31.95
000-107-095	Skid Bottom, New Style RX Shoe.....	19.95
000-076-037	Jet, H 1/8VV 80015 SS-STD	7.95
000-094-009	Nut, 5/16-18 s/s Nylock Half	0.21
000-107-020	Double Thread RX Vacuum Hub	60.95
000-107-089	S/S Heat Treated Star	99.95
000-143-012	Screw, 5/16-18 x 3/4" s/s HHC.....	0.59
000-143-162	Screw, 5/16 x 1" Stripper - 1/4-20 s/s	2.49
000-143-166	Screw, 10-24 x 3/8" s/s BTN HD Cap	0.34
000-143-065	Screw, 10-24 x 1 1/4" s/s BTN HD Cap.....	2.09
000-174-049	Washer, 5/16" s/s Flat.....	0.17
000-015-009	Bracket, Hi Speed RX Handle Brace	11.95
000-094-036	Nut, 1/2" NPT Pipe Plastic	1.59
000-143-096	Screw, 3/8 - 16 x 1" HHC s/s.....	0.69
000-174-055	Washer, Latch Pivot	0.21
000-174-057	Washer, 3/8" s/s Lock.....	0.07

All prices quoted F.O.B. Factory, Mukilteo, WA. Prices subject to change without notice.

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