



Electronic Service Manuals

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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**

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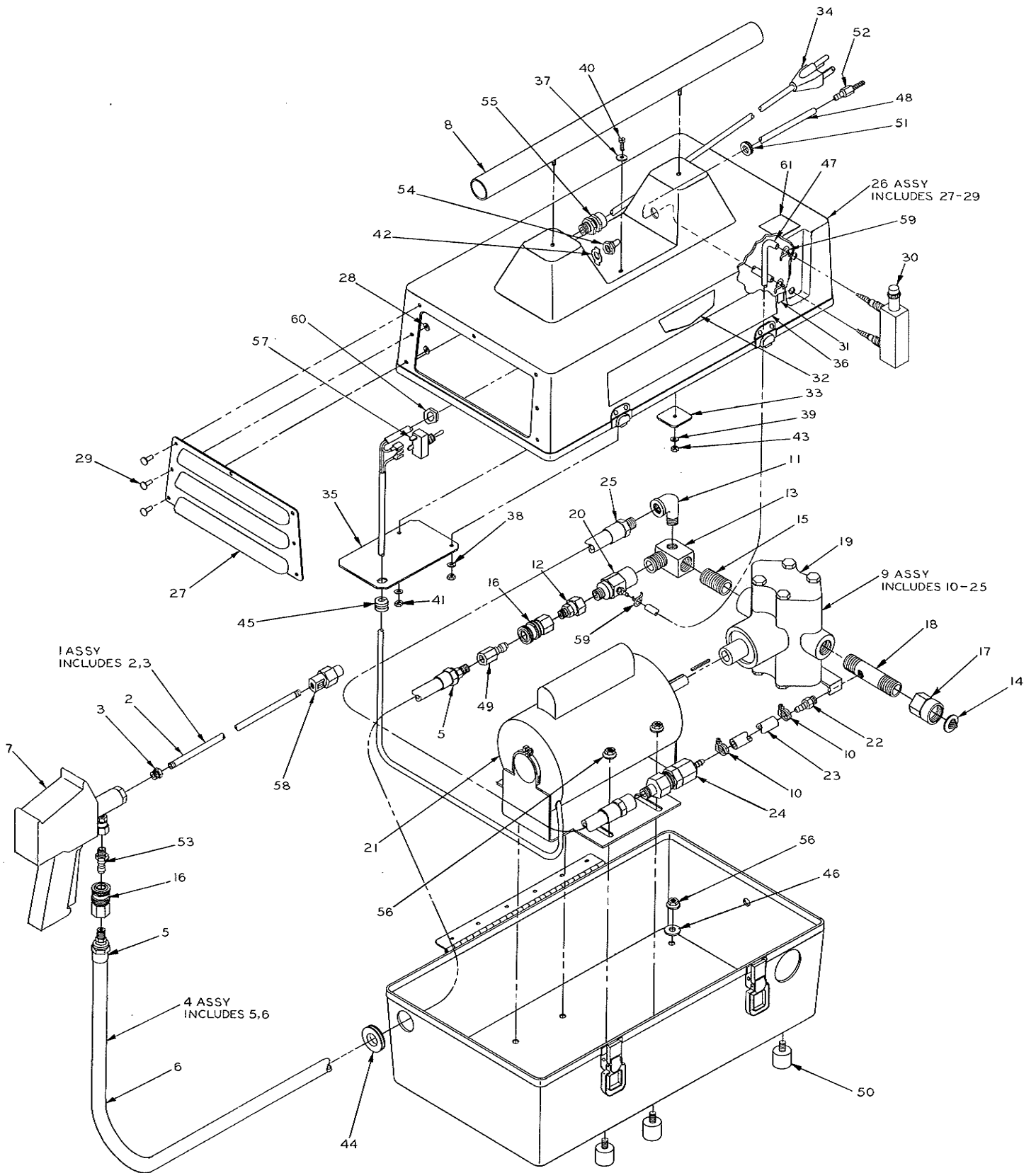


FORM 329-11791
EFFECTIVE NOVEMBER 1, 1979
REVISED FEBRUARY 1, 1982
E.E.O. EMPLOYER M/F

645 E. Seventh St., St. Paul, Minnesota 55106 – (612) 771-5581
Telex No. 29-7403

**PARTS BREAKDOWN
MODEL 1022R
ASSY NO. D21522
SERIAL # 1700 and Up**

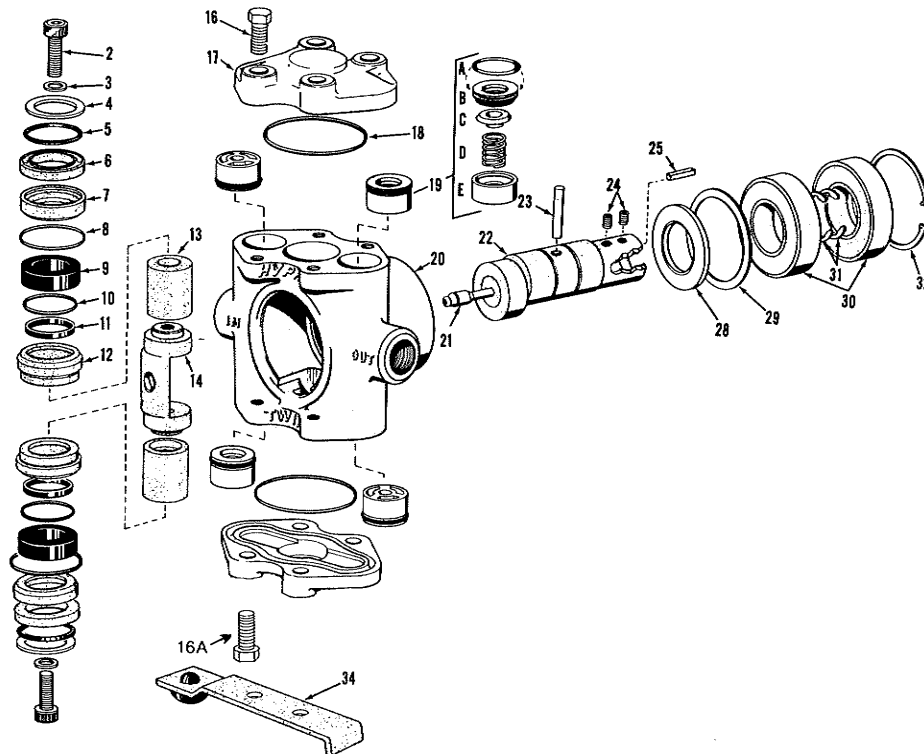
Assy. No.	Part No.	Per Assy	Description	Assy. No.	Part No.	Per Assy	Description
1	B14933	1	Assy – Wand (Includes 2,3)	32	A20816	2	Decal, Logo
2	B14936	1	Tube, Wand	33	A21492	2	Plate Bearing
3	K14934	1	Bushing	34	B21503	1	Cord, Power
4	B22504	1	Assy – 25' Hose (Includes 5,6)	35	A21527	1	Plate
7	K21976	1	Assy – Handle, Squeeze Valve	36	B22005	2	Decal
8	B21489	1	Assy – Handle & Weld Screws	37	K2871-10	2	Washer, Flat
9	C21519	1	Assy – Pump & Motor (Includes 10-25)	38	K2964-10	2	Lockwasher
10	K14895	2	Clamp, Hose	39	K2964-14	2	Lockwasher
11	K15498	1	Elbow, Street	40	K4770-8	2	Screw, Pan Hd.
12	K14863	1	Adapter	41	K5035	2	Nut, Hex
13	A21677	1	Elbow, Street	42	K5619	1	Plate, Indicator
14	K14900	1	Washer, Filter	43	K14501	2	Nut, Hex
15	K15235	1	Nipple	44	K14864	1	Grommet
16	K15487	2	Socket, Quick Coupler	45	K14865	1	Strain Reliever
17	K15503	1	Adapter, G.H.T.	46	K14880-5	2	Flat Washer
18	A21521	1	Nipple	47	K14940-15	1	Tubing, Vinyl
19	K21518	1	Pump	48	K14940-60	1	Tubing, Vinyl
20	K21979	1	Siphon Injector	49	K14999	1	Plug, Quick Coupler
21	K21517	1	Motor 1½ H.P.	50	K15002	6	Mount, Shock
22	K15501	1	Adapter, Barbed	51	K15478	1	Grommet
23	K15768-7	1	Hose, Inlet	52	K23080	1	Screen
24	K22323	1	Pressure Limiting Valve	53	K15490	1	Plug, Quick Coupler
25	K21678	1	Pulse Hose	54	K16440	1	Seal, Switch
26	C23861	1	Assy – Case & Louvers (Includes 27-29)	55	K21497	1	Strain Reliever
27	C21676	2	Louver	56	K21528	6	Lock Nut
28	K2871-6	14	Washer, Flat	57	K21682	1	Switch, Toggle
29	K22358	14	Rivet	58	K21686	1	Nozzle, Hi-Lo
30	K23857	1	Flowmeter	59	K21978	1	Clip, Tubing
31	A22439	1	Decal	60	K22683	1	Nut
				61	A23859	1	Decal





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**PARTS BREAKDOWN — 1022R
PUMP-K 21518**

PISTON REPAIR KITS

Piston Seal Repair Kit No. K22184 Consists of two No. K22186 Seal Rings, two No. K22198 Guides, two K22185 O-Rings, two No. K15612 O-Rings, two No. K22182 Piston Seals, two No. K15625 Piston Bolts, two No. K15630 Washer Gaskets, two No. K22181 Seal Expanders.

Complete Piston Repair Kit No. K22199 Consists of one No. K22198 Piston Seal Repair Kit, two No. K22188 Pistons.

**CRANKSHAFT
ASSEMBLY KITS**

Hollow Shaft Sub-Assembly No. K22196 Consists of one No. K22197 Crankshaft, one No. K18943 Crankpin Retainer, one No. K18375 Cam Bearing one No. K15631 Grease Fitting Assembly, one No. K15605 key, two No. K22175 Set Screws.

Hollow Shaft Assembly No. K22194 Consists of one No. K22196 Crankshaft Sub-Assembly, two No. K15613 Retaining Rings, two No. K15619 Main Bearings, one No. K15620 Bearing Shield, one No. K15621 Bearing Spacer.

Ref. No.	Quantity Required	Part Number	Description
2	2	K15625	PISTON BOLT
3	2	K15630	WASHER GASKET
4	2	K22180	O-RING RETAINER
5	2	K22181	SEAL EXPANDER
6	2	K22182	PISTON SEAL
7	2	K22183	SEAL RETAINER
8	2	K15612	O-RING FOR SEAL RETAINER
9	2	K22184	GUIDE
10	2	K22185	O-RING FOR SEAL RING
11	2	K22186	SEAL RING
12	2	K22187	GUIDE RETAINER
13	2	K22188	PISTON
14	1	K15591	CONNECTING ROD
16	8	K22189	CYLINDER HEAD BOLT
17	2	K22190	CYLINDER HEAD (CAST IRON)
18	2	K15608	O-RING FOR CYLINDER HEAD
19	4	K22191	VALVE ASSEMBLY: CONSISTS OF NO K15606 O-RING (REF. A), NO. K15633 VALVE SEAT (REF. B), NO. K18463 VALVE POPPET (REF. C), NO. K15616 VALVE SPRING (REF. D), NO. K22192 VALVE SPRING RETAINER (REF. E).
20	1	K22193	BODY (CAST IRON)
21	1	K15631	GREASE FITTING
22	1	K22194	HOLLOW CRANKSHAFT ASSEMBLY (SEE LISTING ABOVE FOR DESCRIPTION).
23	1	K18943	CRANKPIN RETAINER
24	2	K22175	SET SCREWS FOR HOLLOW SHAFT
25	1	K15605	SPLINE KEY FOR HOLLOW SHAFT
28	1	K15620	SHIELD
29	1	K15621	SPACER
30	2	K15619	MAIN BEARING
31	2	K15613	RETAINING RING (SHAFT)
32	1	K15614	RETAINING RING (HOUSING)
34	1	K22195	TORQUE ARM

NOTE: When ordering parts, give QUANTITY, PART NUMBER, DESCRIPTION, and COMPLETE MODEL NUMBER. Reference numbers are used ONLY to identify parts in the drawing and are NOT to be used as order numbers.

PARTS BREAKDOWN – 518 & 518R

PUMP-K 21493

PISTON CUP REPAIR KITS

Rubber Cup Repair Kit No. K15657: Consists of two each of following parts: No. K15625 Piston Cap Screw (Ref. No. 4A), No. K15630 Washer Gasket (Ref. No. 4B), No. K15607 Cup Spreader O-Ring (Ref. No. 4C), No. K15622 Rubber Cup (Ref. No. 4D), No. K15609 Backing Plate O-Ring (Ref. No. 4E), No. K15602 Seal Ring (Ref. No. 4F).

Teflon Cup Repair Kit No. K15658: Same as above Kit No. K15657 except with 2 No. K15623 teflon cups.

PISTON CUP AND GUIDE REPAIR KITS

Rubber Cup and Piston Guide Kit No. K18940: consists of Rubber Cup Kit No. K15657 plus two No. K15601 Piston Guides (Ref. No. 7)

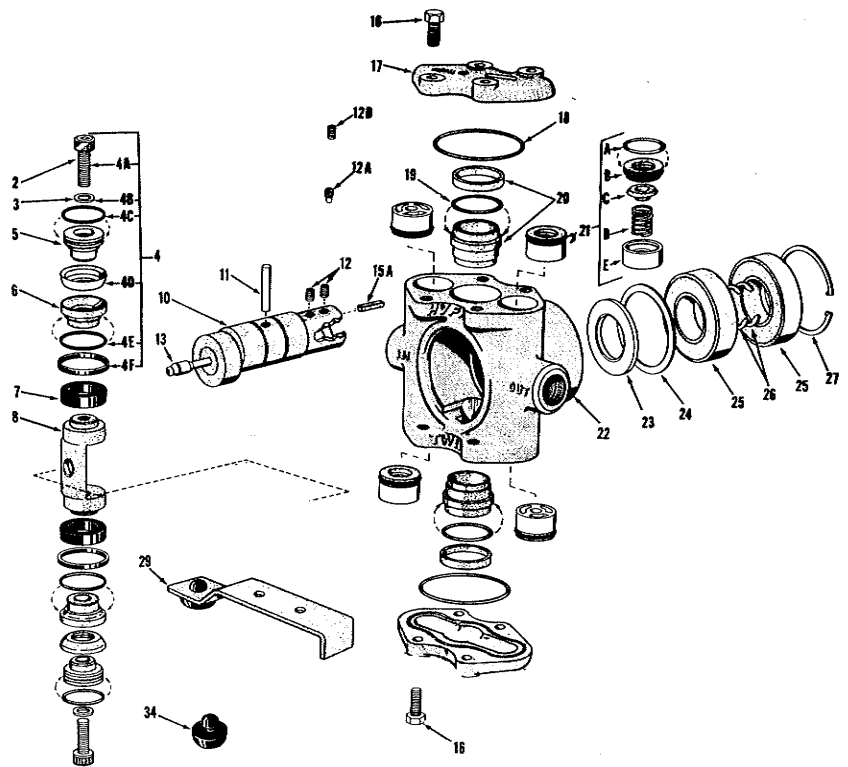
Teflon Cup and Piston Guide Kit No. K18941: consists of Teflon Cup Kit No. K15658 plus two No. K15601 Piston Guides.

CRANKSHAFT ASSEMBLIES

Crankshaft Sub-Assembly	Complete Assembly	Pump Model No.
PART NO.	PART NO.	No.
K22179	K22178	5315H

SUB-ASSEMBLIES includes shaft (Ref. No. 10) with crankpin bearing, grease fitting (Ref. 13), retainer peg (Ref. 11), spline key, and set screws.

COMPLETE ASSEMBLIES include the sub-assembly plus parts indentified by Reference Numbers 23 thru 26.



TO ORDER PARTS: Give part number and part description. ALSO, give COMPLETE pump model number-include all letters which appear before and after model number. Reference numbers are used ONLY to identify parts in drawing; do not use for ordering.

Ref. No.	Quantity Required Per Pump	Parts Number	Parts Description
2	2	K15625	PISTON CAP SCREW
3	2	K15630	WASHER GASKET (ALWAYS USE NEW WASHER GASKET WHEN REPLACING PISTON ASSEMBLY)
4	1	K15657	PISTON REPAIR KIT – WITH RUBBER CUPS – PUMPS WITH SUFFIX LETTER R
4	1	K15658	PISTON REPAIR KIT – WITH TEFLON CUPS – PUMPS WITH SUFFIX LETTER C
5	2	K15615	PISTON CUP SPREADER
6	2	K15600	CUP BACKING PLATE
7	2	K15601	PISTON GUIDE
8	1	K15591	CONNECTING ROD
10	1		CRANKSHAFT ASSEMBLIES – SEE TABLE ABOVE FOR PART NUMBERS, ETC.
11	1	K18943	CRANKPIN RETAINER PEG
12	2	K22175	SET SCREW (FINE THREAD)
13	1	K15631	GREASE FITTING ASSEMBLY
15A	1	K15605	SPLINE KEY
16	8	K15624	HEADBOLT
17	2	K15590	CYLINDER HEAD – CAST-IRON
18	2	K15608	O-RING FOR CYLINDER HEAD
19	2	K15612	O-RING FOR CYLINDER SLEEVE
20	2	K15664	NI-RESIST CYLINDER SLEEVE ASSEMBLY
21	4	K15654	UNITIZED VALVE: CONSISTS OF NO. K15606 RING (REF. LETTER A), NO. K15633 VALVE SEAT (REF. B) NO. K15637 VALVE POPPET (REF. C), NO. K15616 VALVE SPRING (REF. D), NO. K15639 VALVE SPRING RETAINER (REF. E)
22	1	K15588	BODY – CAST IRON
23	1	K15620	BEARING SHIELD
24	1	K15621	MAIN BEARING SPACER
25	2	K15619	MAIN BEARING (BALL BEARING)
26	2	K15613	BEARING RETAINER RING (SHAFT)
27	1	K15614	BEARING RETAINER RING (HOUSING)
29	1	K22176	TORGUE ARM
34	1	K22177	BUMPER