



5500/5520

Automatic Scrubber
Fregadora Automática

Model No.:

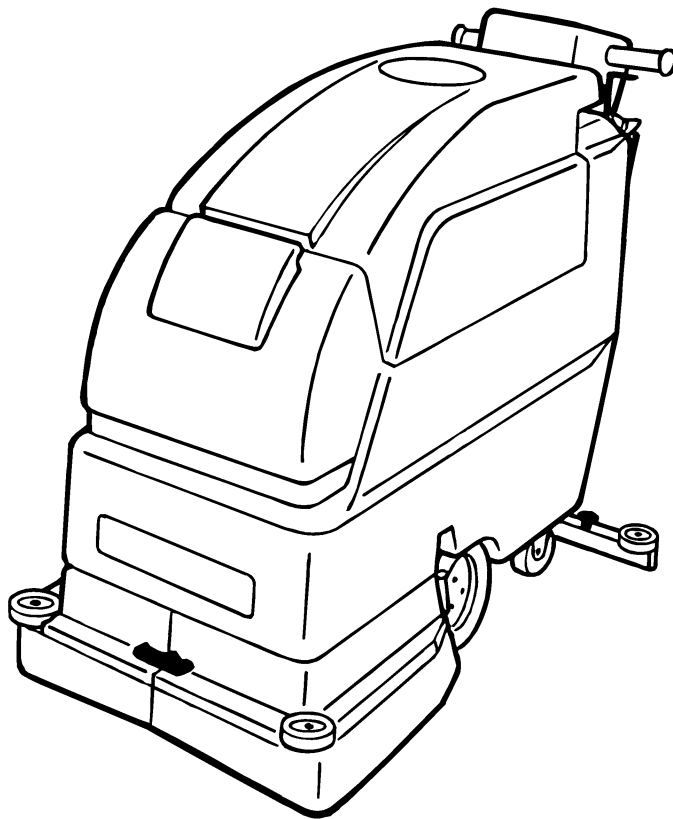
607550 – 5500 Pac

607549 – 5500

607563 – 5520 Pac

607562 – 5520

Operator and Parts Manual
Manual de Operación y de Piezas

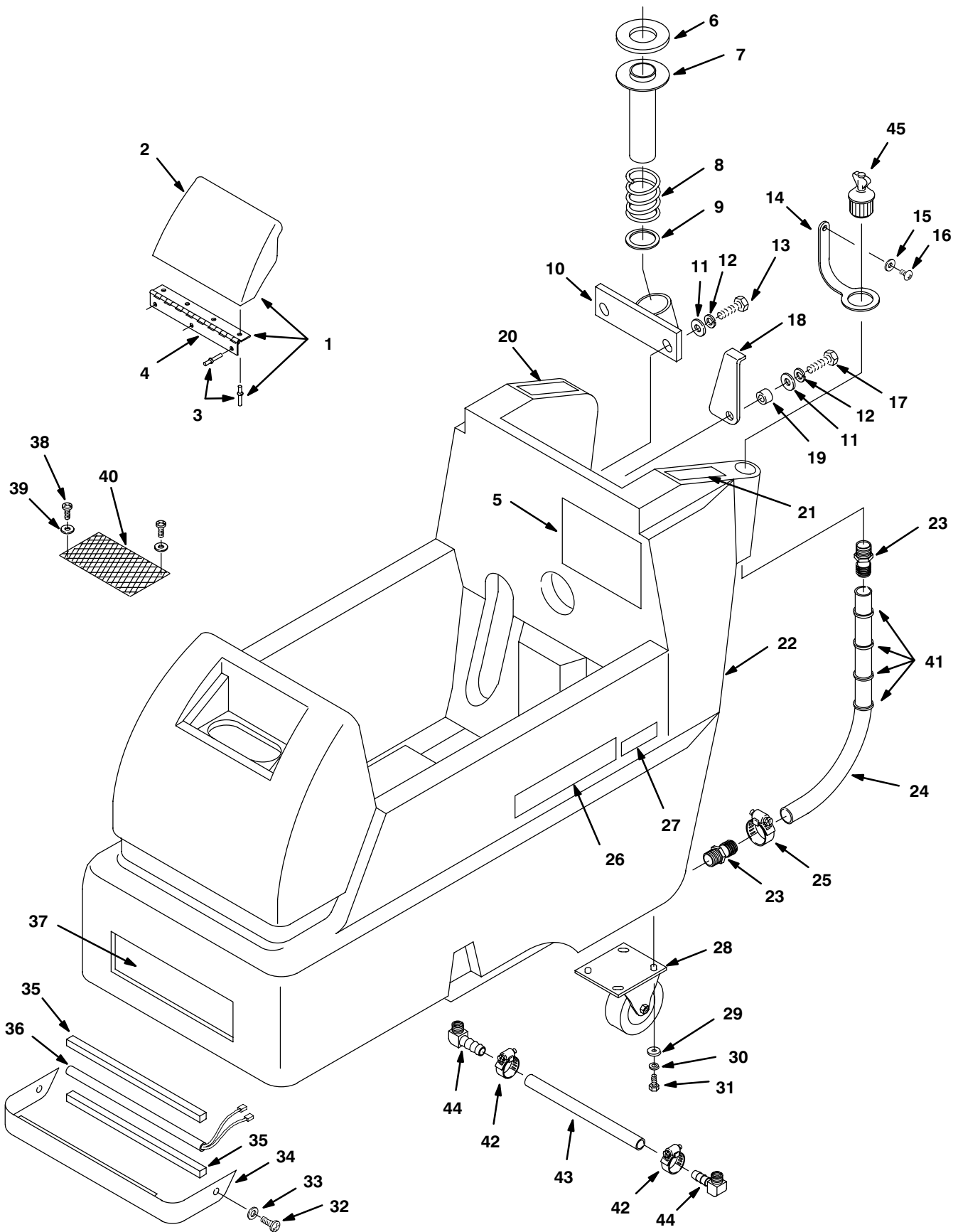


TENNANT COMPANY
Commercial Products
12875 RANSOM STREET
HOLLAND MI 49424 U.S.A.

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607551
Rev. 00 (11-99)

SOLUTION TANK GROUP
GRUPE DEL DEPÓSITO DE DISOLUCIÓN



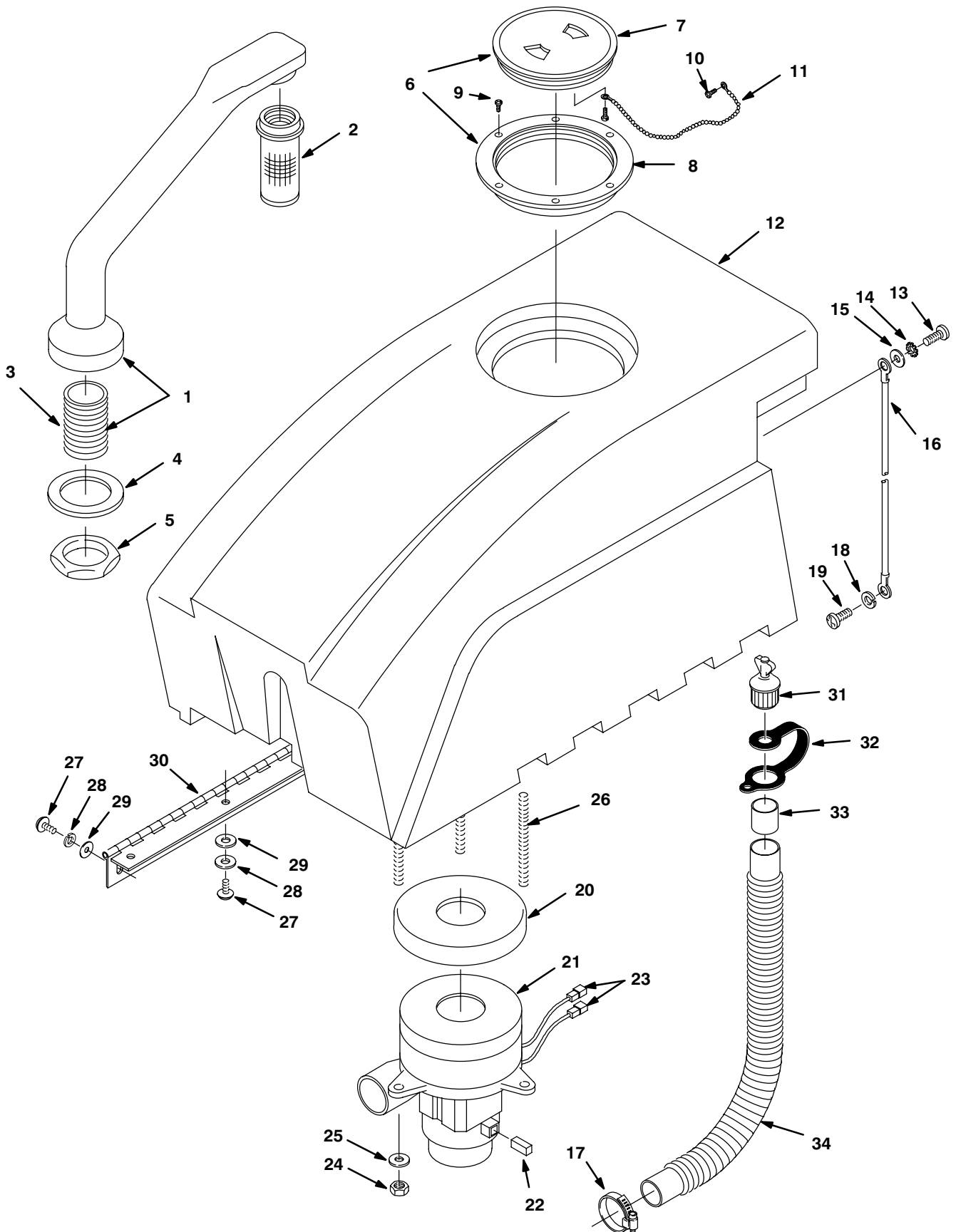
**SOLUTION TANK GROUP
GRUPE DEL DEPÓSITO DE DISOLUCIÓN**

REF	PART #	DESCRIPTION	QTY.
∇1	607982	ASM., SOLUTION TANK COVER, TEAL	1
▲2	607515	COVER, TANK, TEAL	1
▲3	140706	RIVET, POP	7
▲4	230626	HINGE, COVER	1
5	603233	DECAL, BATTERY RECHARGE	1
6	100151	●GASKET, TUBE ADAPTER	1
7	230664	ADAPTER, TUBE	1
8	140424	SPRING, TUBE ADAPTER	1
9	602878	WASHER	1
10	602847	BRACKET, VAC TUBE	1
11	140027	WASHER, FLAT	3
12	140015	WASHER, LOCK	3
13	200 031 488	SCREW, M8X1.25X20MM	2
14	600476	●STRAP, PLUG REAR FILL	1
15	140011	WASHER, FLAT	1
16	140350	SCREW, #10X1/2	1
17	200 031 488	SCREW, M8X1.25X20MM	1
18	230925	SUPPORT, RECOVERY TANK	1
19	140116	BUSHING	1
20	600649	DECAL, SOLUTION LEVER CE	1
21	600650	DECAL, SQUEEGEE LEVER CE	1
22	607552	TANK, SOLUTION, TEAL	1
23	150529	HOSE BARB	2

REF	PART #	DESCRIPTION	QTY.
24	160229	TUBING	2 ft
25	630369	CLAMP	1
26	N/A	DECAL,	2
27	608118	DECAL, "5500"	2
	608119	DECAL, "5520"	2
28	630002	●CASTER, 4"	2
29	140025	WASHER, FLAT	8
30	140333	WASHER, LOCK	8
31	140276	SCREW, M10X1.5X16MM	8
32	578 141 000	SCREW, M5X10MM	2
33	140018	WASHER, FLAT	2
34	600298	SHIELD, LIGHT	1
35	26578	GASKET	2.5 ft
36	130023	LIGHT, SAFETY	1
37	120192	DECAL, TENNANT LOGO	1
38	140826	SCREW, #6X3/4	2
39	140032	WASHER, FLAT	2
40	602529	●SCREEN, FILL	1
41	130040	WIRE TIE	4
42	140310	CLAMP	2
43	12712	TUBING	1.48 ft
44	150419	ELBOW, 1/4MX3/8H 90°	2
45	621324	●PLUG, EXPANSION	1

- ∇ Assembly
- ▲ Included in Assembly
- Recommended Stock Item

RECOVERY TANK GROUP
CONJUNTO DEPOSITO RECUPERAR



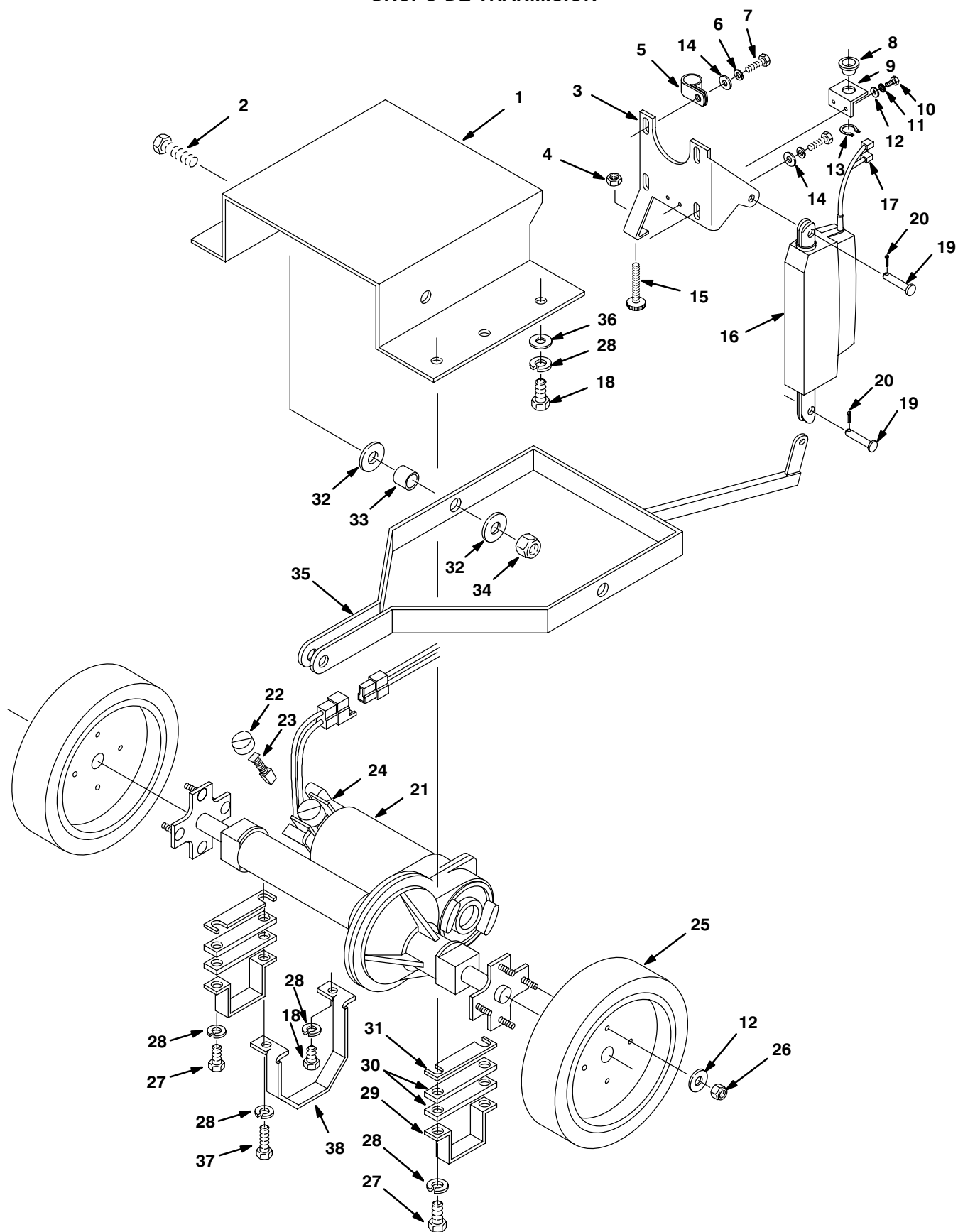
**RECOVERY TANK GROUP
CONJUNTO DEPOSITO RECUPERAR**

REF	PART #	DESCRIPTION	QTY.
1	701103	ASM.,STANDPIPE	1
2	180613	●FLOAT, SHUT-OFF	1
3	230187	NIPPLE	1
4	101714	●GASKET	1
5	210240	NUT, FLANGED	1
∇6	100102	●ASM.,LID CLEAR W/STANDARD HOLE	1
▲7	100105	●LID, CENTER CLEAR ONLY	1
▲8	100109	●LID, OUTER RING ONLY	1
9	140826	SCREW, #6X3/4	6
10	3701.6	SCREW, #6X3/8	2
11	230513	CHAIN	1
12	607554	TANK, RECOVERY, TEAL	1
13	578 187 000	SCREW, M06X1.0X12MM	1
14	140052	WASHER, 1/4 EXT	1
15	140000	WASHER, FLAT	1
16	140960	●CABLE	1
17	140308	CLAMP	1

REF	PART #	DESCRIPTION	QTY.
18	140015	WASHER, LOCK	1
19	200 031 488	SCREW, M8X1.25X20MM	1
20	0174..10	●SEAT, NEOPRENE	1
∇21	130477	●MOTOR, VAC 5.7 /3 STAGE 24 VDC	1
▲22	190163	●CARBON BRUSH 2/PK	2
23	130096	TERMINAL, MALE DISCONNECT	2
24	140284	NUT	3
25	140000	WASHER, FLAT	3
26	140353	STUD	3
27	578 187 000	SCREW, M06X1.0X12MM	11
28	140052	WASHER, LOCK	11
29	140000	WASHER, FLAT	11
30	600311	●HINGE, RECOVERY TANK	1
31	621324	●PLUG, EXPANSION	2
32	578441	●STRAP, DRAINHOSE	1
33	630394	●SLEEVE, DRAINHOSE	1
34	630068	●HOSE, DRAIN	1

- ∇ Assembly
- ▲ Included in Assembly
- Recommended Stock Item

DRIVE GROUP
GRUPO DE TRANSMISIÓN



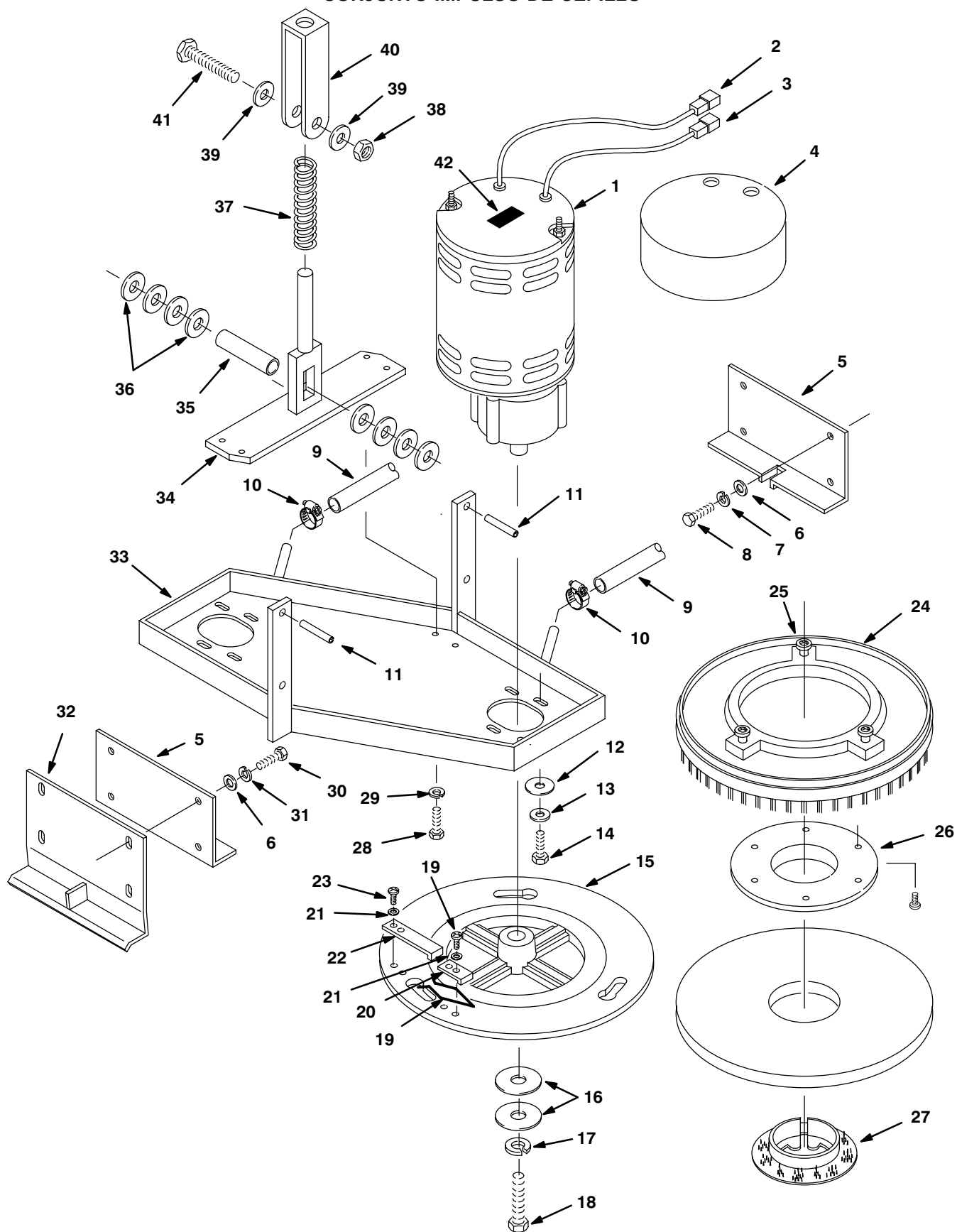
DRIVE GROUP
GRUPO DE TRANSMISIÓN

REF	PART #	DESCRIPTION	QTY.
1	600288	PLATE, BASE TRANSAXLE	1
2	140236	SCREW, 1/2-13X1 1/4	2
3	600292	BRACKET, ACTUATOR	1
4	140548	NUT	2
5	140314	CLAMP, INSULATED 3/4 ID	1
6	140015	WASHER, LOCK	4
7	200 031 494	SCREW, M8X1.25X30	4
8	621235	BUSHING, CABLE	1
9	630157	BRACKET, CABLE GUIDE	1
10	200 031 432	SCREW, M6X1/0X10	2
11	140052	WASHER, 1/4 EXT	2
12	140000	WASHER, FLAT	10
13	621 236 000	RING, RETAINING	1
14	140027	WASHER, FLAT	4
15	240191	●KNOB, 5/16-18X2	1
16	600952	●ACUTATOR	1
17	281 004 001	TERMINAL, QC	2
18	140276	SCREW, M10X1.5X16MM	2
19	604076	PIN, CLEVIS	2

REF	PART #	DESCRIPTION	QTY.
20	578421	PIN, COTTER	2
▽21	630126	●TRANSAXLE 20"	1
▲22	630503	●CAP	2
▲23	630504	●CARBON BRUSH	2
▲24	600606	●END BELL, TRANSAXLE MOTOR	1
25	640013	●WHEEL, 8"	2
26	630268	NUT	8
27	612 255 000	SCREW, M10X35MM	3
28	140333	WASHER, LOCK	6
29	602881	BRACKET, TRANSAXLE MOUNT	2
30	600304	SPACER, AXLE	4
31	602883	SPACER	2
32	140045	WASHER, FLAT	4
33	602882	BUSHING	2
34	140516	NUT	2
35	600290	BRACKET, LIFT DUAL MOTOR	1
36	140028	WASHER, FLAT	2
37	601 094 000	SCREW, M10X45MM	1
38	603466	GUARD, TRANSAXLE	1

- ▽ Assembly
- ▲ Included in Assembly
- Recommended Stock Item

BRUSH GROUP
CONJUNTO IMPULSO DE CEPILLO



BRUSH GROUP
CONJUNTO IMPULSO DE CEPILLO

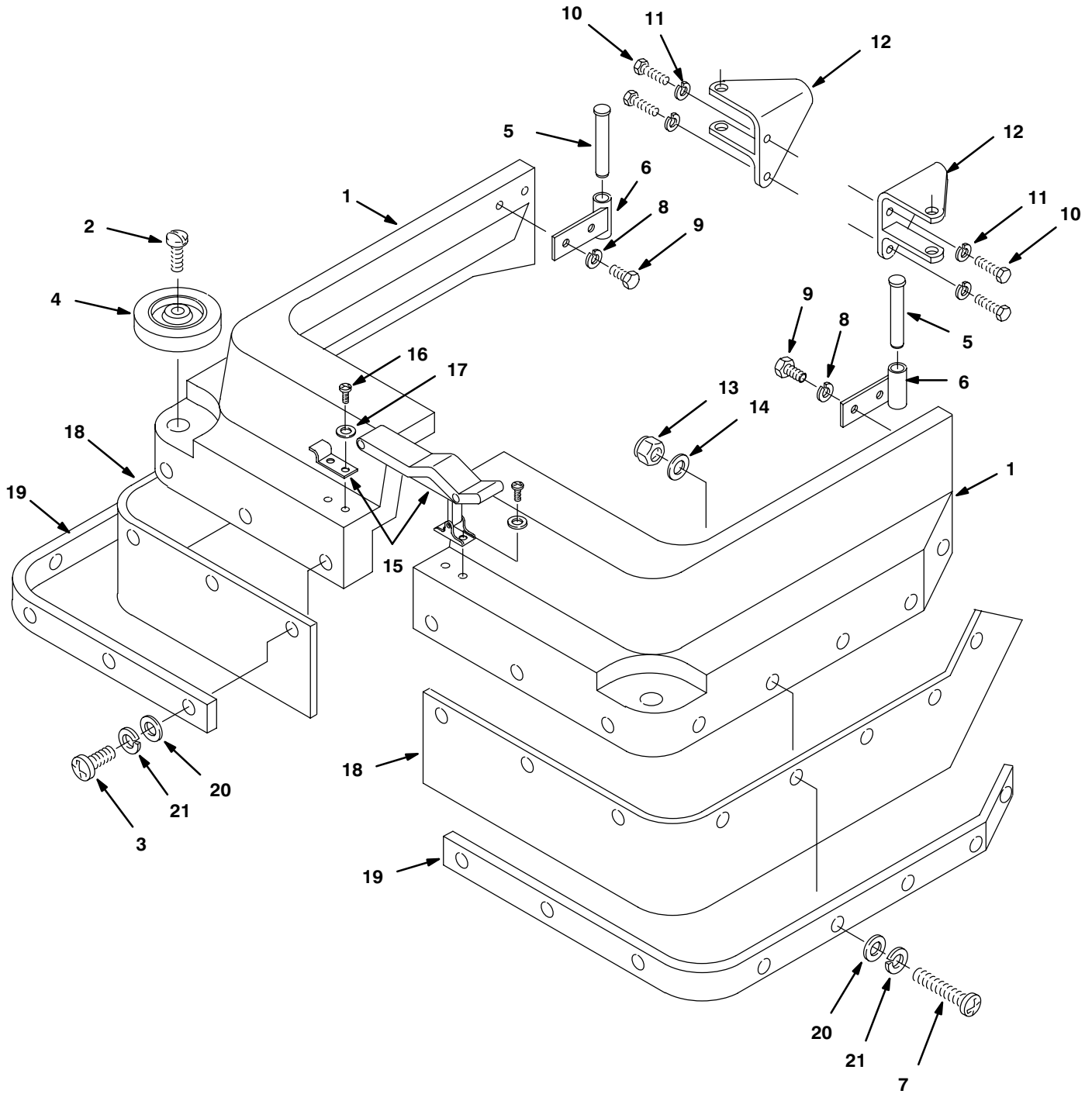
222615

REF	PART #	DESCRIPTION	QTY.
∇1	130491	●MOTOR & GEAR BOX, BRUSH	2
▲	630609	●ASM., GEAR BOX	1
▲	190741	●ASM., BRUSH CARD	1
▲	190970	●BRUSH, CARBON	4
▲	140632	●KEY, 1/4X1	1
✗2	130163	TERMINAL RING (NEGATIVE) LEFT MOTOR	1
	130109	TERMINAL RING (POSITIVE) LEFT MOTOR	1
✗3	130163	TERMINAL RING (NEGATIVE) RIGHT MOTOR	1
	130192	TERMINAL RING (POSITIVE) RIGHT MOTOR	1
4	100764	COVER, BRUSH MOTOR	2
5	600300	PLATE, GUIDE	2
6	140003	WASHER, FENDER	8
7	140016	WASHER, LOCK	4
8	140272	SCREW, M6X1.0X16MM	4
9	12712	TUBING	2.08 ft
10	140310	CLAMP	2
11	140618	PIN, ROLL	4
12	140028	WASHER, FLAT	8
13	140017	WASHER, LOCK	8
14	140202	SCREW, 3/8-16X1	8
15	230672	PLATE, DRIVER	2
16	25732	WASHER, FLAT	4
17	140015	WASHER, LOCK	2
18	140219	SCREW, 5/16-18X1	2

REF	PART #	DESCRIPTION	QTY.
19	140417	●CLIP, SPRING	2
20	230651	●CLAMP, BRUSH PLATE	2
21	140018	WASHER, LOCK	4
22	230697	●STOP, DRIVER RELEASE	1
23	140887	SCREW, 10-24X3/8	4
∇24	240262	●PAD DRIVER, 12" PK/2 (5500)	1
	602928	●PAD DRIVER, 13" PK/2 (5520)	1
▲25	240238	●LUGS, W/SCREWS (SET OF 3)	1
▲26	100106	PLATE, PAD DRIVER BASE	2
▲27	100107	●RING, PAD RETAINER SNAP-IN	2
28	200 031 488	SCREW, M08X1.25X20MM	4
29	140015	WASHER, LOCK	4
30	140272	SCREW, 1/2-13X3	1
31	140016	WASHER, LOCK	1
32	600299	SKIRT, FRONT LIP	1
33	600289	BRACKET, MOTOR MOUNT	1
34	602558	BRACKET, SPRING MOUNT	1
35	602930	BUSHING	1
36	578 298 000	WASHER, FLAT	8
37	602555	SPRING	1
38	600200	NUT	1
39	140028	WASHER, FLAT	2
40	602556	BRACKET, SPRING	1
41	140225	SCREW, 3/8-16X2	1
42	100058	TAPE, ACRYLIC	.50 ft

- ∇ Assembly
- ▲ Included in Assembly
- Recommended Stock Item

BRUSH SKIRT GROUP
CONJUNTO JUEGO DE CEPILLO



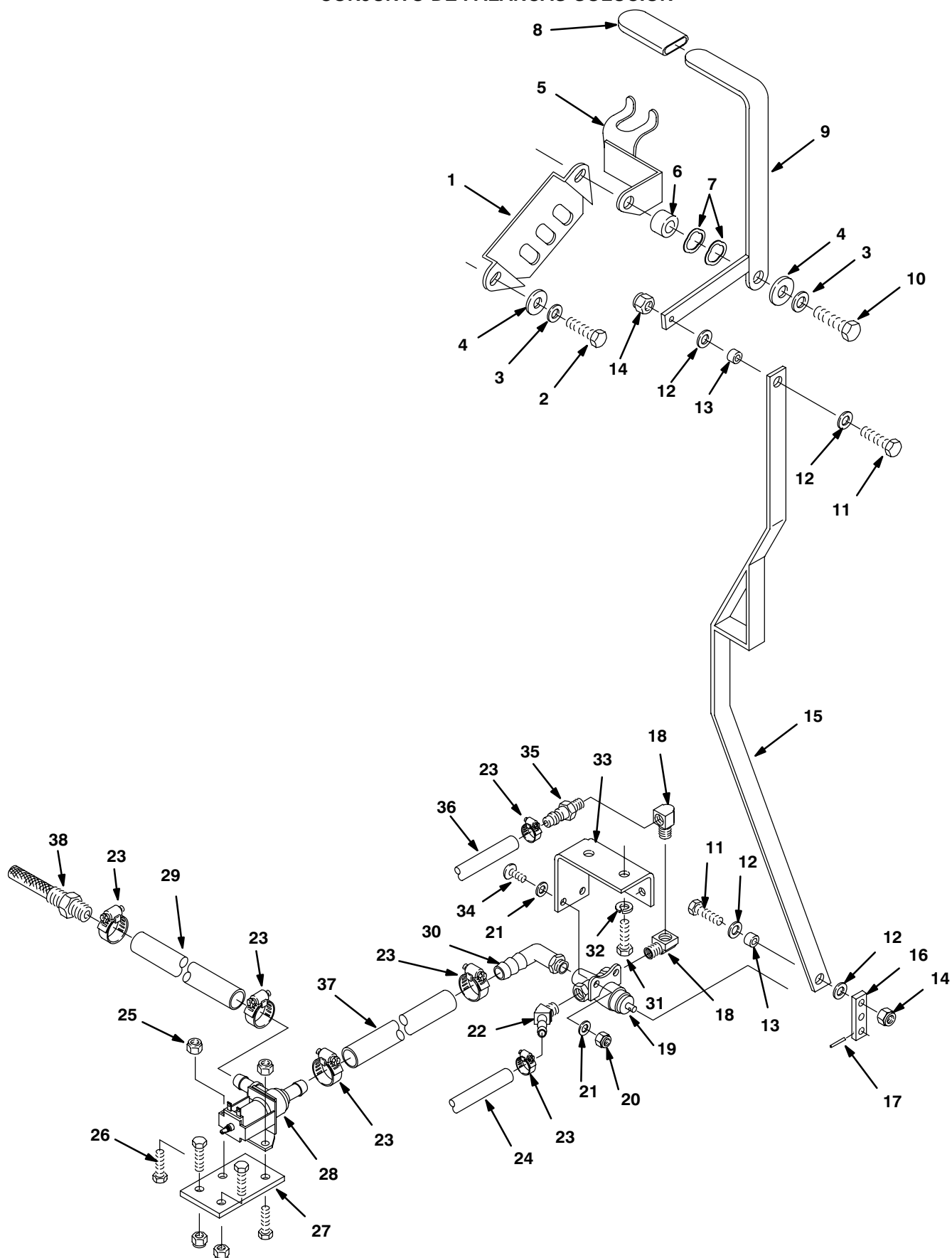
**BRUSH SKIRT GROUP
CONJUNTO JUEGO DE CEPILLO**

REF	PART #	DESCRIPTION	QTY.
1	607558	SKIRT LEFT SIDE, TEAL, 5500	1
	607564	SKIRT LEFT SIDE, TEAL, 5520	1
	607560	SKIRT RIGHT SIDE, TEAL, 5500	1
	607566	SKIRT RIGHT SIDE, TEAL, 5520	1
2	603154	●SCREW	2
3	578 144 000	SCREW, M5X16MM	10
4	630450	●WHEEL, RUBBER	2
5	230943	●PIN, SKIRT	2
6	600301	BRACKET, SKIRT MOUNT	2
7	140293	SCREW, M5X0.8X30MM	6
8	140015	WASHER, LOCK	4
9	578 237 000	SCREW, M8X18	4
10	578237000	SCREW, M8X18	4
11	140015	WASHER, LOCK	4

REF	PART #	DESCRIPTION	QTY.
12	607951	BRACKET, SKIRT MOUNT, LH	1
	607952	BRACKET, SKIRT MOUNT, RH	1
13	140283	NUT	6
14	140011	WASHER, FLAT	6
15	140932	●LATCH, HOOD	1
16	200 070 340	SCREW, M4X.7X8MM	4
17	140023	WASHER, LOCK	4
18	600295	●SPLASH GUARD 5500	2
	600294	●SPLASH GUARD 5520	2
19	600297	STRAP, SPLASH GUARD 5500	2
	600296	STRAP, SPLASH GUARD 5520	2
20	140011	WASHER, FLAT	16
21	140018	WASHER, LOCK	16

- Recommended Stock Item

SOLUTION CONTROL GROUP
CONJUNTO DE PALANCAS SOLUCIÓN



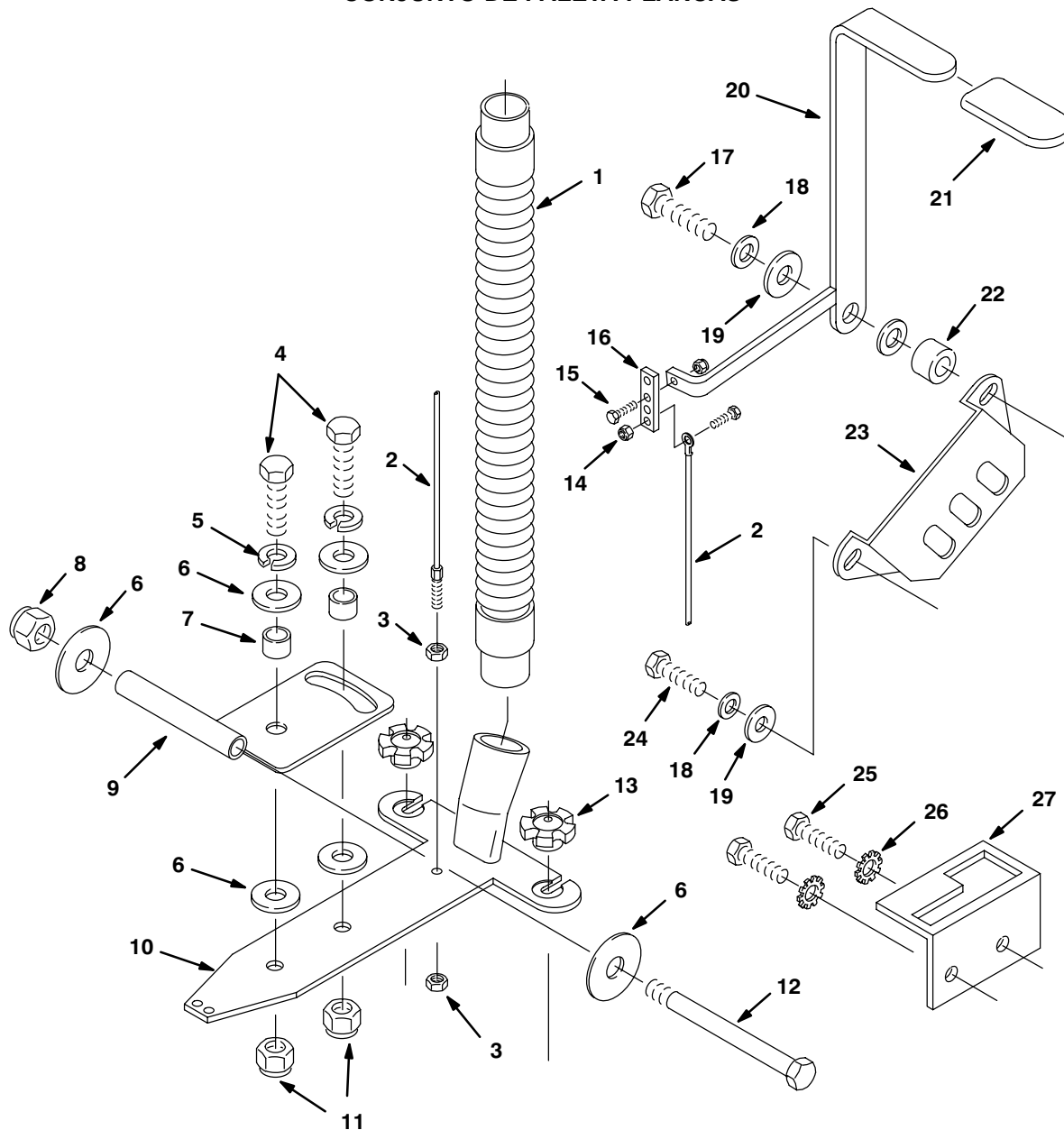
SOLUTION CONTROL GROUP
CONJUNTO DE PALANCAS SOLUCIÓN

REF	PART #	DESCRIPTION	QTY.
1	230661	PLATE, LOCK CONTROL HOUSING	1
2	200 031 488	SCREW, M8X1.25X20MM	1
3	140015	WASHER, LOCK	2
4	140027	WASHER, FLAT	2
5	600280.BK	WELDMENT, DRAIN HOSE HANGER	1
6	230735	BUSHING	2
7	140060	WASHER, WAVE	2
8	200816	●GRIP, HANDLE	1
9	602884	HANDLE, SOLUTION VALVE	1
10	200 031 496	SCREW, M8X1.25X35	1
11	140208	SCREW, 1/4-20X1	2
12	140000	WASHER, FLAT	4
13	140134	BUSHING	2
14	140501	NUT	2
15	230718	LEVER, SOLUTION VALVE	1
16	230657	ARM, VALVE	1
17	140616	PIN, ROLL	1
18	150406	ELBOW, STREET 1/4 90°	2
19	210259	●VALVE, 3-WAY 5/16 PORTS	1

REF	PART #	DESCRIPTION	QTY.
20	140283	NUT	2
21	140011	WASHER, FLAT	4
22	28303	HOSE BARB	1
23	140310	CLAMP	6
24	12712	TUBING	2.08 ft
25	069 762 303	NUT	4
26	140272	SCREW, M6X1.0X16MM	4
27	602879	PLATE, SOLENOID MOUNT	1
28	603310	●VALVE, SOLENOID 24 VDC	1
29	600350	TUBING, CLEAR	.167 ft
30	150410	ELBOW, 1/4X5/8	1
31	140272	SCREW, M06X1.0X16MM	2
32	140016	WASHER, LOCK	2
33	600303	BRACKET, VALVE	1
34	578 144 000	SCREW, M5X16MM	2
35	150516	HOSE BARB	1
36	12712	TUBING	2.08 ft
37	600350	TUBING, CLEAR	.25 ft
38	602929	●FILTER, SOLUTION TANK	1

- Recommended Stock Item

SQUEEGEE CONTROL GROUP
CONJUNTO DE PALETA PLANCAS

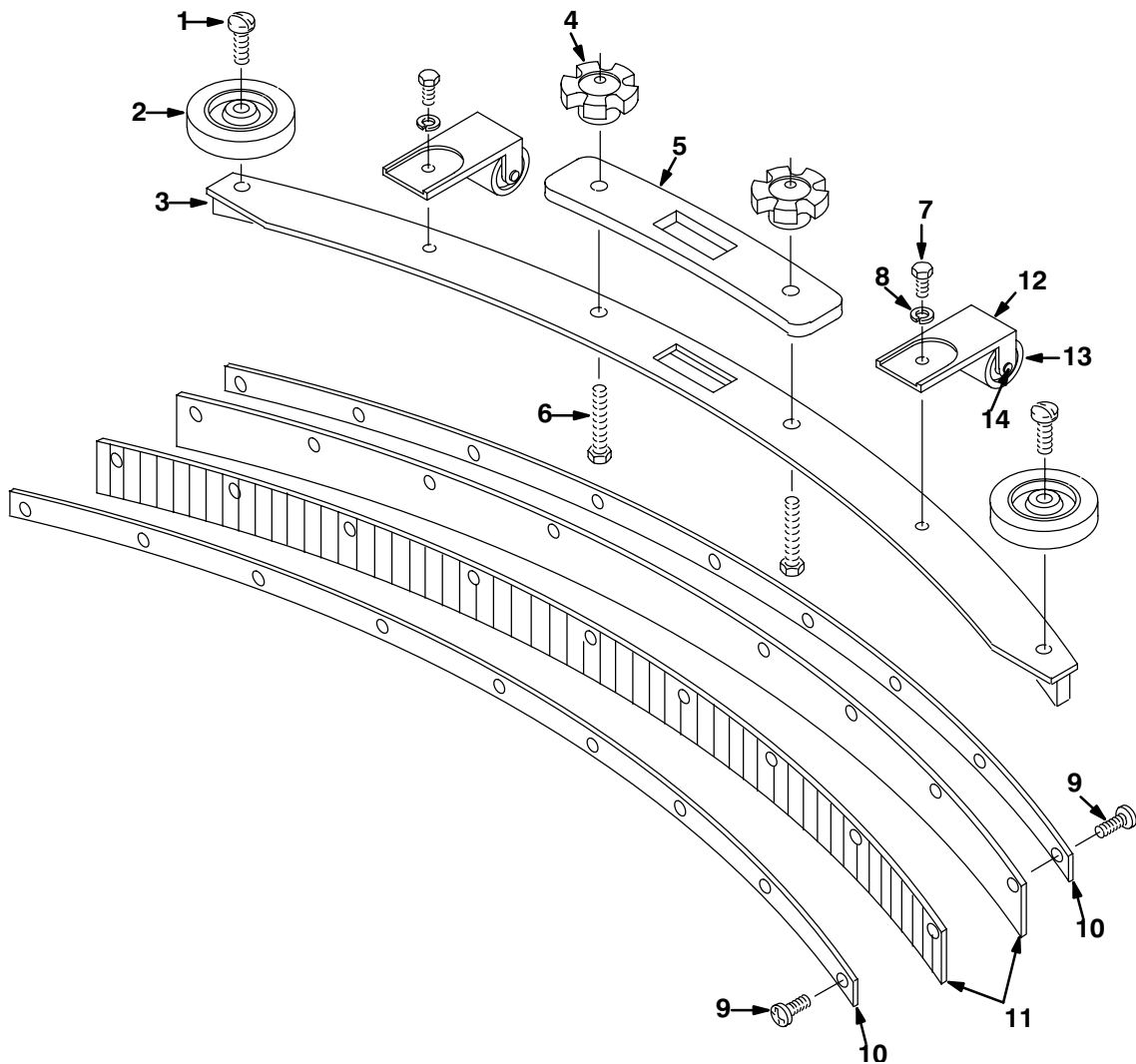


REF	PART #	DESCRIPTION	QTY.
1	160613	●HOSE, VAC 1.5X30" W/CUFFS	1
2	630156	●CABLE, SQUEEGEE LIFT	2
3	140501	NUT	2
4	602981	SCREW, 1/2-13X5 1/2	2
5	140024	WASHER, LOCK	6
6	140045	WASHER, FLAT	2
7	140139	BUSHING	1
8	612 091 000	NUT	1
9	600293	PIVOT, SQUEEGEE MOUNT	1
10	230730.BK	BRACKET, SQUEEGEE MOUNT	2
11	140516	NUT	1
12	069 767 158	SCREW, 1/2-20X6	2
13	27257	●KNOB, 5/16-18	2
14	069 762 303	NUT	2

REF	PART #	DESCRIPTION	QTY.
15	140272	SCREW, M6X1.0X16MM	2
16	602880	PLATE, SQUEEGEE CABLE LINK	2
17	200 031 496	SCREW, M08X35	1
18	140015	WASHER, LOCK	4
19	140027	WASHER, FLAT	4
20	602885	HANDLE, SQUEEGEE LIFT	1
21	200816	●GRIP, HANDLE	1
22	604358	BUSHING SPACER	1
23	230661	PLATE, LOCK CONTROL HOUSING	1
24	200 031 488	SCREW, M8X1.25X20MM	1
25	140268	SCREW, M5X.8X12MM	2
26	140031	WASHER, LOCK	2
27	230712	PLATE, SQUEEGEE LOCK	1

● Recommended Stock Item

SQUEEGEE GROUP
CONJUNTO PALETA

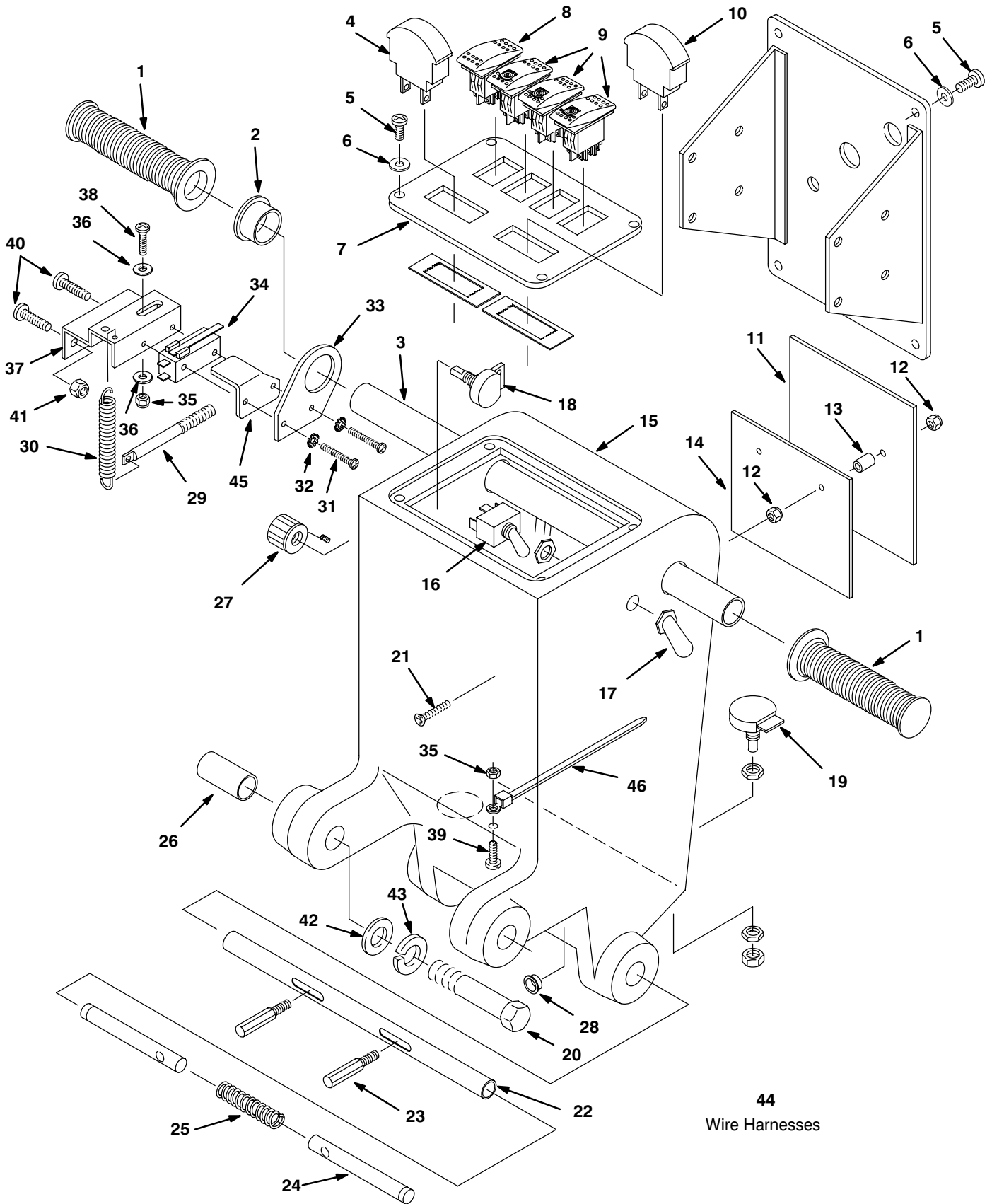


REF	PART #	DESCRIPTION	QTY.
▽	603262	ASSEMBLY, SQUEEGEE, CURVED (5500)	1
	603263	ASSEMBLY, SQUEEGEE, CURVED (5520)	1
▲1	140799	SCREW, 5/16-18 X 1-1/2	2
▲2	630450	WHEEL, 76 DIA X 22 WD RUBBER	2
▲3	602958	SQUEEGEE WELDMENT, 5500	1
	602960	SQUEEGEE WELDMENT, 5520	1
▲4	27257	●KNOB, 5/16-18 THREAD - BLACK	2
▲5	603260	GASKET, SQUEEGEE CURVED	1
▲6	140221	SCREW, 5/16-18 X 1-1/4	2
▲7	140226	SCREW, 5/16-18 X 5/8	2

REF	PART #	DESCRIPTION	QTY.
▲8	140015	WASHER, 5/16 SPLITLOCK	2
▲9	605975	SCREW, 10-24 X 1/2"	24-28
▲10	602962	PLATE, SQUEEGEE RETAINING 5500	2
	602963	PLATE, SQUEEGEE RETAINING 5520	2
▲11	603660	●BLADE, SQUEEGEE 34" (5500) 31"	2
	603661	●BLADE, SQUEEGEE 40" (5520) 34"	2
▲▽	700844	●ASM., SQUEEGEE ROLLER	2
▲12	230474.BK	BRACKET, SQUEEGEE ROLLER	2
▲13	26548	ROLLER	2
▲14	140710	RIVET, AXLE 3/8 X 1.6	2

●=RECOMMENDED STOCK ITEMS/PIEZAS RECOMENDADAS EN ALMACÉN
 ▽=ASSEMBLY / CONJUNTO
 ▲=INCLUDED IN ASSEMBLY / INCLUIDO A CONJUNTA

CONSOLE GROUP
CONJUNTO CONSOLA DE CONTROLES



44
Wire Harnesses

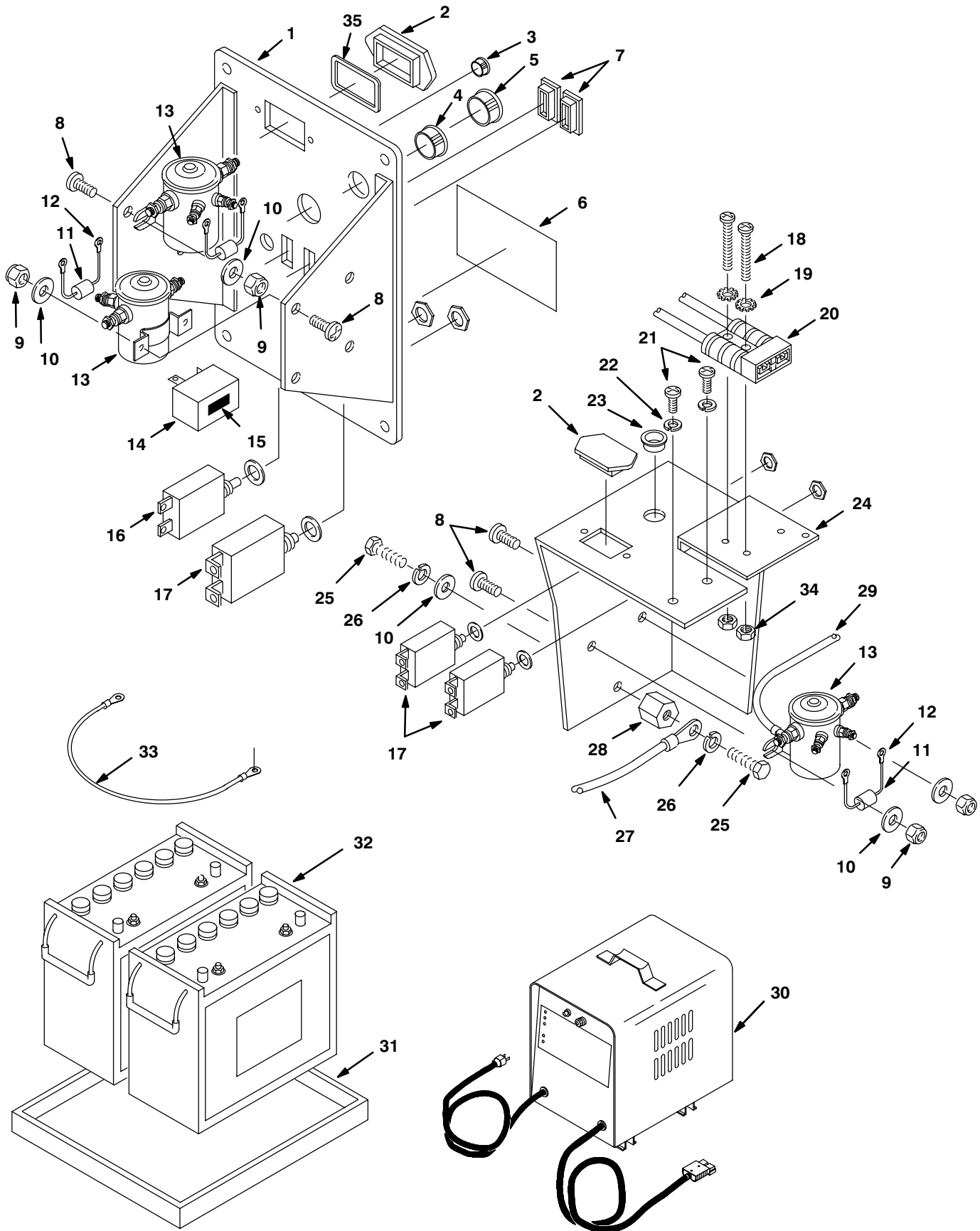
**CONSOLE GROUP
CONJUNTO CONSOLA DE CONTROLES**

REF	PART #	DESCRIPTION	QTY.
1	200823	●GRIP, HANDLE TUBE	2
2	27099	BUSHING	1
3	603050	HANDLE, TUBE	1
4	602903	●GAUGE, BRUSH PRESSURE	1
5	578 141 000	SCREW, M5X10MM	8
6	140018	WASHER, LOCK	8
7	602560	PANEL, SWITCH	1
8	603399	●SWITCH, DPDT MOM. ON/OFF/MOM. ON	1
9	601107	●SWITCH, LIGHTED ROCKER	3
10	130015	●METER, BATTERY VOLTAGE 24V	1
11	630104	●SPEED CONTROL, PMB, 55 AMP	1
12	200 160 014	NUT	4
13	630261	SPACER	2
14	630128	HEAT SINK	1
15	607556	HOUSING, CONTROL, TEAL	1
16	601108	●SWITCH, TOGGLE	1
17	130753	●BOOT, SWITCH	1
18	130776	●POTENTIOMETER, 50K	1
19	130775	●POTENTIOMETER, 50K LOCKABLE	1
20	140351	SCREW, M12X1.75X70MM	2
21	630304	SCREW, M4X35MM	2
22	230715	TUBE, HANDLE ADJUSTMENT	1
23	230649	PIN, HANDLE ADJUSTMENT	2
24	230710	PIN, HANDLE LOCK	2

REF	PART #	DESCRIPTION	QTY.
25	140415	SPRING, LOCK PIN	1
26	140155	BUSHING	2
27	601110	●KNOB, SPEED CONTROL	1
28	603007	BUSHING, SNAP	1
29	602886	PIN, SPRING RETURN	1
30	601118	SPRING, EXPANSION	1
31	140829	SCREW, 6-32X1	2
32	140019	WASHER, LOCK	2
33	27098	BRACKET, SWITCH	1
34	130729	●SWITCH, ROLL	1
35	140552	NUT	2
36	140000	WASHER, FLAT	2
37	25671	MOUNT, SWITCH	1
38	140890	SCREW, 10-24X1/2	1
39	140900	SCREW, 10-24X3/4 TRSPLH	2
40	578 321 000	SCREW, M6X16MM	2
41	069 762 303	NUT	2
42	3148.816	WASHER, FLAT	2
43	140024	WASHER, LOCK	2
44	602873	HARNESS CONSOLE W/POT. (NOT SHOWN)	1
	602874	HARNESS MAIN/SWITCH/CONSOLE (NOT SHOWN)	1
45	603830	PLATE, GUARD SWITCH	1
46	26561	CABLE TIE	1

- Recommended Stock Item

ELECTRICAL / BATTERY GROUP
GRUPO DEL ELÉCTRICO/BATERÍA



**ELECTRICAL / BATTERY GROUP
GRUPO DEL ELÉCTRICO/BATERÍA**

REF	PART #	DESCRIPTION	QTY.
1	602559	PANEL, CONTROL HOUSING	1
2	222519	PLUG	1
3	069 764 626	PLUG, HOLE 012.7	1
4	130161	PLUG, DOME .850	1
5	130175	PLUG, DOME .750	1
6	120649	DECAL, WARNING BATTERY	1
7	582150	PLUG, ACCESSORY SWITCH	2
8	578 321 000	SCREW, M6X16MM	6
9	140284	NUT, M6X1.0 NYLOCK	4
10	140000	WASHER, FLAT	4
11	130423	●DIODE, 400V	3
12	130125	RING, TERMINAL	6
13	130218	●SOLENOID, 24V	3
14	130021	●FLASHER, 24VDC	1
15	100058	TAPE, ACRYLIC	.08 ft
16	130737	●BREAKER, CIRCUIT BRUSH 10 AMP	1
17	602951	●BREAKER, CIRCUIT 35 AMP	3
18	140829	SCREW, 6-32X1	2

REF	PART #	DESCRIPTION	QTY.
19	140019	WASHER, LOCK	2
20	27833	●CONNECTOR, RED 50A W/O CONTACTS	1
21	578 321 000	SCREW, M6X16MM	1
22	140018	WASHER, LOCK	2
23	130698	BUSHING, SNAP	4
24	602887	BRACKET	1
25	140553	SCREW, 1/4-20X1/2	2
26	140016	WASHER, LOCK	1
27	602871	CABLE, BATTERY #6 BLACKX20"	1
28	578427	STANDOFF	1
29	602872	CABLE, BATTERY #6 REDX28"	1
30	630121	CHARGER, 115V 60HZ 20 AMP	1
31	601991	TRAY, BATTERY	1
32	600394	BATTERY, 12V 215A	2
33	130364	●CABLE, BATTERY #6 BLACKX15"	1
34	140539	NUT, 6-32 KEP	2
35	603224	O-RING .929 ID X .996 OD	1

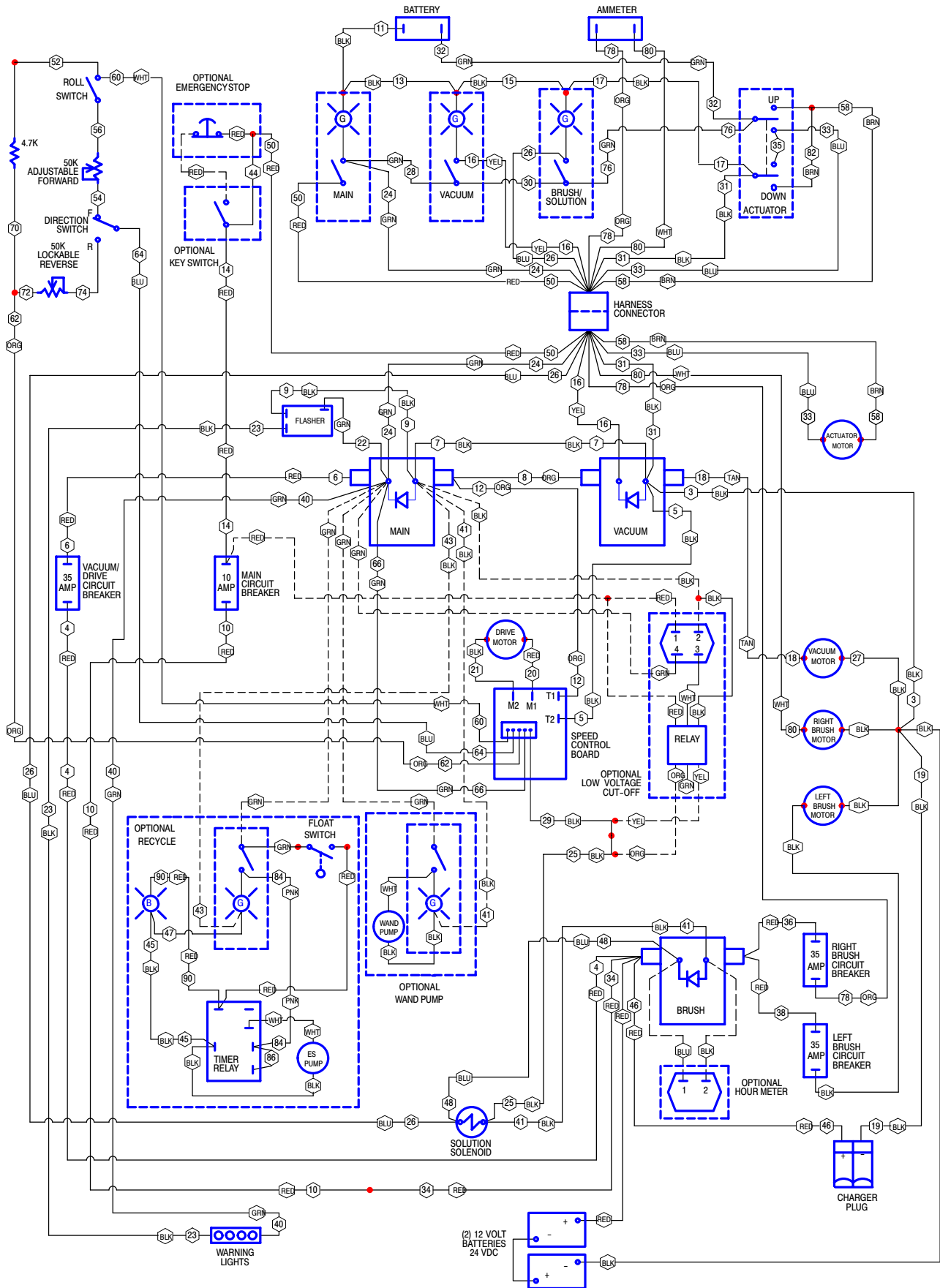
- Recommended Stock Item

OPTIONS (Not Shown)

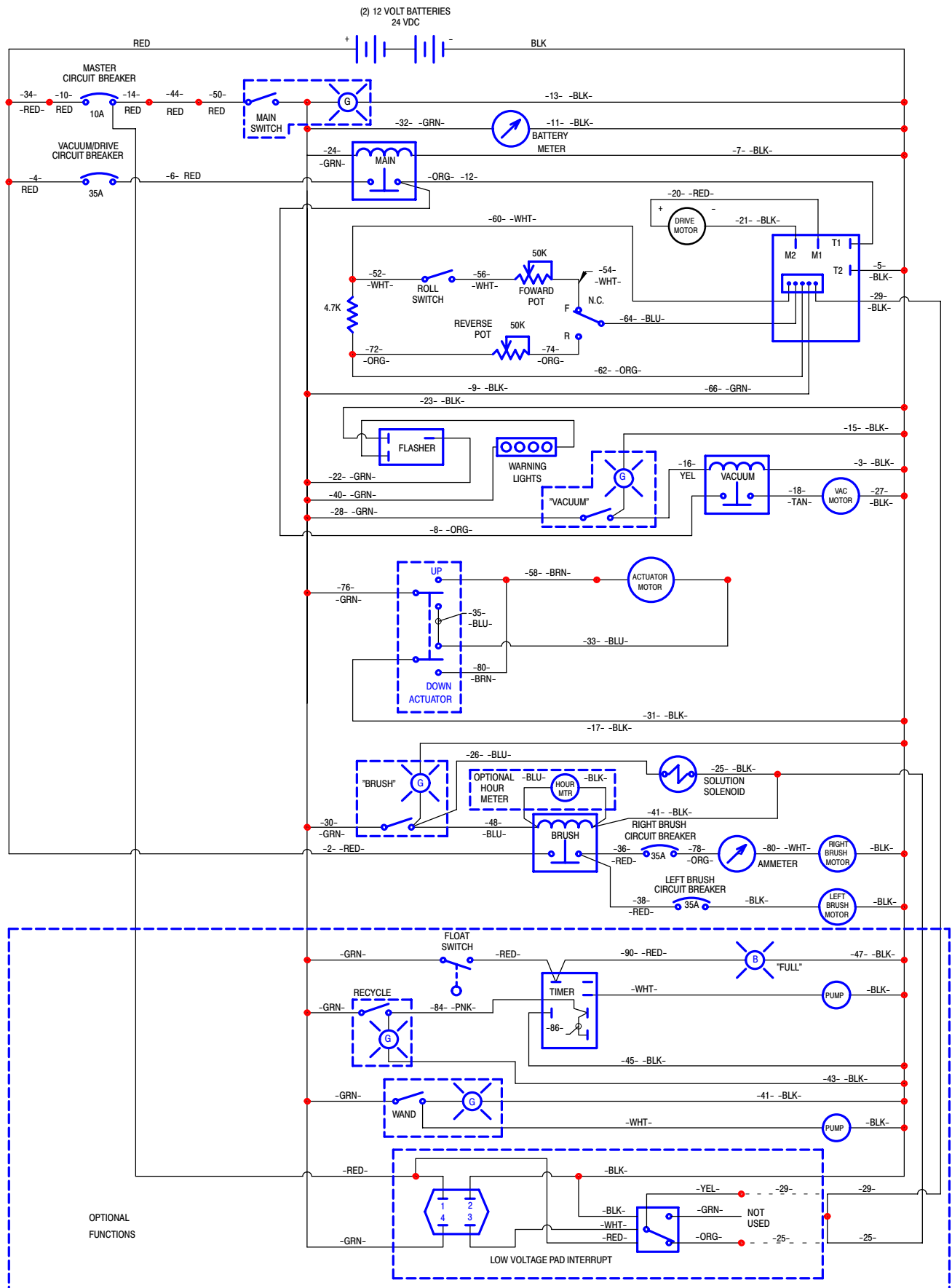
OPCIONES (No Se Muestran)

REF	PART #	DESCRIPTION	QTY.
N/S	602993	KIT, KEY SWITCH	1
N/S	604357	KIT, AIR-FILLED TIRE	1
N/S	604259	KIT, FOAM-FILLED TIRE	1
N/S	602999	KIT, HOUR METER	1
N/S	603074	KIT, LOW VOLTAGE CUTOFF	1
N/S	602995	KIT, EMERGENCY STOP	1
N/S	602898	KIT, 5500 CONVERSION	1
N/S	602899	KIT, 5520 CONVERSION	1

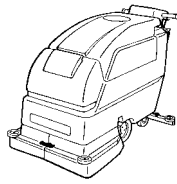
WIRING DIAGRAM DIAGRAMA DE CABLEADO



WIRING DIAGRAM DIAGRAMA DE CABLEADO



5500/5520



MAINTENANCE CHECK LIST WALL CHART

To maintain excellent service of this machine, perform this simple check list as described below. Refer to your Operator's Manual for further assistance.

DAILY	DESCRIPTION	PROCEDURE
EVERY 4 HOURS OPERATION	✓ BATTERIES	Recharge if needed.
	✓ PADS/BRUSHES	Remove and clean. Replace if worn.
	✓ SQUEEGEE	Wipe off with a dry cloth. Store in "up" position. Inspect for damage.
	✓ REC/SOL TANKS	Drain and rinse thoroughly. Clean vacuum intake hole.
	✓ FLOAT SHUTOFF SCREEN	Remove and rinse thoroughly. Inspect for damage.
	✓ MACHINE	Clean with nonabrasive cleaner.
WEEKLY EVERY 20 HOURS OPERATION	✓ TANKS/SOLUTION LINE	Flush with .7L (24 oz.) acetic acid solution to 11.4L (3 gal) of water. Rinse afterwards.
	✓ BATTERIES	Check water level, clean battery tops and inspect for loose or corroded battery cables.
MONTHLY EVERY 80 HOURS OPERATION	✓ MACHINE	Inspect for loose nuts, bolts and water leaks.
	✓ PIVOT POINTS	Lubricate with an water resistant oil.
	✓ FRONT CASTERS	Lubricate each caster grease fitting with a water resistant grease.
EVERY 250 HOURS OPERATION	✓ VACUUM, DRIVE AND BRUSH MOTORS	Inspect carbon brushes, replace if worn to 10 mm (0.38 in) or less.

TROUBLE SHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
No power, nothing runs.	Faulty main switch	Contact Service Center.
	Batteries need charging.	See CHARGING BATTERIES.
	Faulty battery(s).	Replace battery(s).
	Loose battery cable.	Tighten loose cable.
	MAIN circuit breaker has tripped.	Determine cause and reset breaker button.
Brush motors do not run.	Brush/Solution switch is not on.	Turn on brush/solution switch.
	Control grips are not rotated.	Rotate control grips.
	Brush circuit breaker(s) has tripped.	Clean or replace pad or brush and re-set brush circuit breaker button.
	Faulty brush motor or wiring.	Contact Service Center.
	Carbon brushes worn.	Contact Service Center.
	Faulty brush switch or solenoid.	Contact Service Center.

TROUBLE SHOOTING GUIDE continued on back side.

TROUBLE SHOOTING GUIDE - Continued

PROBLEM	CAUSE	SOLUTION
Vacuum motor does not run.	Faulty vacuum switch.	Contact Service Center.
	Vacuum circuit breaker has tripped.	Remove obstruction and reset breaker.
	Faulty vacuum motor or wiring.	Contact Service Center.
	Carbon brushes worn.	Contact Service Center.
Drive motor does not run.	Drive motor circuit breaker has tripped.	Determine cause and reset breaker.
	Faulty speed control circuit board or connection.	Contact Service Center.
	Faulty solenoid.	Contact Service Center.
	Faulty drive motor.	Contact Service Center.
	Faulty wiring.	Contact Service Center.
	Worn carbon brushes.	Contact Service Center.
Drive motor runs, but not correctly.	Faulty potentiometer or speed control board.	Contact Service Center
	Loose wire connection.	Contact Service Center.
Little or no solution flow.	Solution flow lever in not activated.	Push solution flow lever forward.
	Solution line or solution tank filter is clogged.	Remove hose and blow compressed air through it. Flush solution tank after each use.
	Solution valve or solenoid is clogged.	Remove valve or solenoid and clean. Do not scratch inside of valve.
	Faulty solution switch or solenoid.	Contact Service Center.
	Solution flow adjustment knob needs adjusting.	Turn solution flow knob clockwise to increase flow.
Short run time.	Batteries not fully charged.	Charge batteries.
	Bad cell in one or more batteries.	Replace batteries.
	Batteries need maintenance.	See BATTERY MAINTENANCE.
	Faulty charger.	Replace battery charger.
Poor water pick up.	Recovery tank is full.	Empty recovery tank.
	Float shutoff screen inside recovery tank is clogged.	Remove screen and clean.
	Squeegee is clogged with debris.	Clean squeegee.
	Squeegee blades are worn.	Replace squeegee blades.
	Squeegee thumbscrews are loose.	Tighten thumbscrews.
	Vacuum hose connections are loose or hose has a hole.	Push hose cuffs firmly on connections. Replace hose if damaged..
	Recovery tank inlet hole is obstructed.	Empty recovery tank and tilt tank side-ways to access inlet hole, remove obstruction.
	Tank gasket is defective.	Replace gasket.
	Drain hose plug is loose.	Tighten drain plug.
	Recovery tank lid is loose.	Tighten lid.
	Vacuum motor is loose.	Contact Service Center.
Battery charge level is low.	Charge batteries. Do not run machine when battery meter is in the red zone.	
Safety lights do not work.	Flasher is burned out.	Contact Service Center.

FOR SAFETY: Before attempting any maintenance procedures on machine, stop on level surface, turn off and disconnect battery charger. Repairs must be performed by authorized personnel.