

240X Floor Scrubber Battery

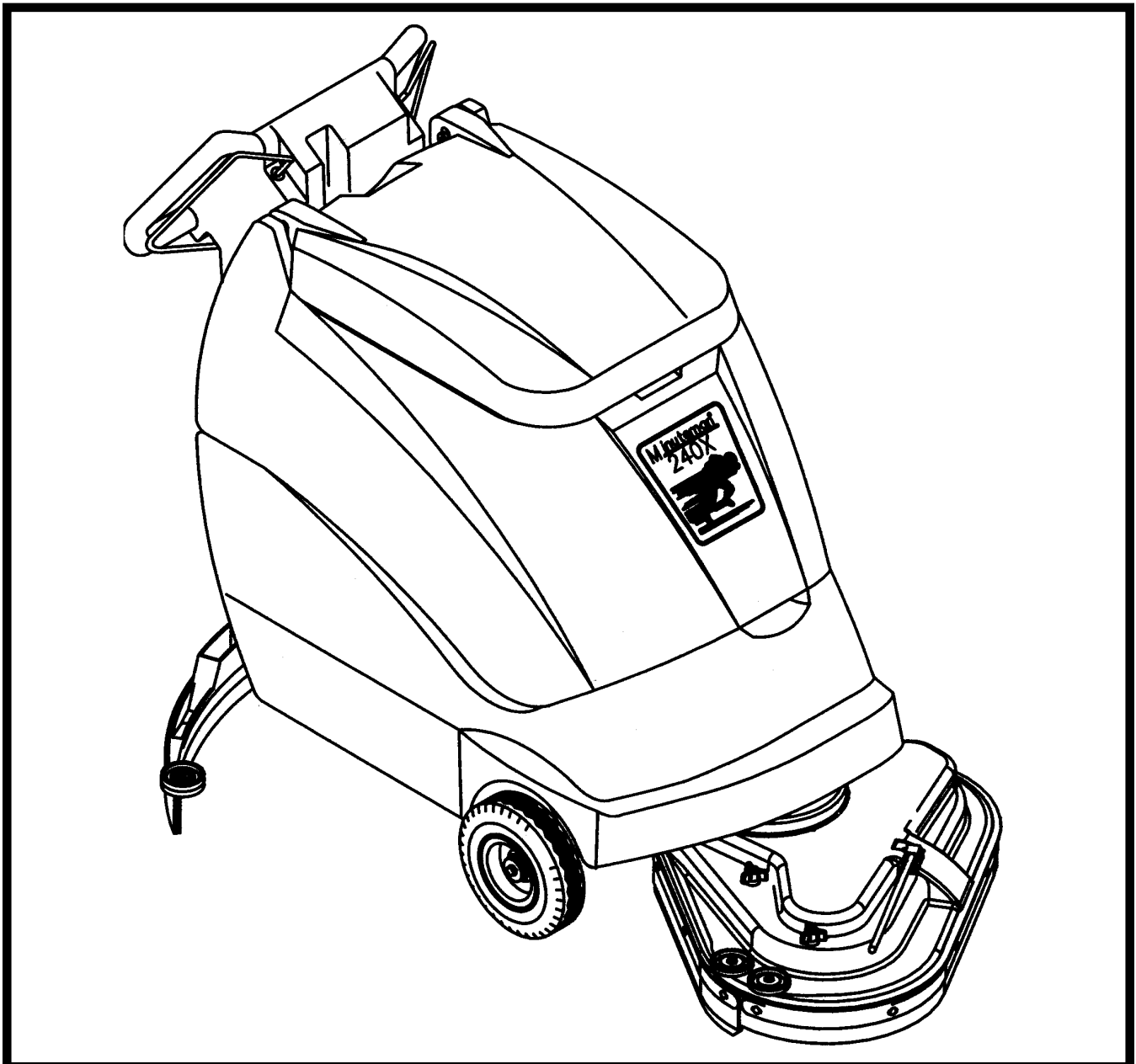
Model:
MC240024QP, CE

OPERATION

SERVICE

PARTS

CARE



Revised 11/03

Minuteman[®]

EC Declaration of Conformity

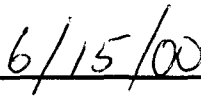
according to Directives 72/23, 89/392, and 89/336

We, Minuteman International Incorporated, of 111 South Rohlwing Road Addison Illinois 60101 USA, declare under our sole responsibility that the product MC20004CE Commercial Automatic Floor Scrubber to which this declaration relates corresponds to the relevant requirements of the EC Directives 72/23, 89/392 and 89/336. The following standards were used to determine compliance with the Directives: EN 292, EN 294, EN 811, EN 55014, EN 55104 and IEC 335-1-72.

| SOUND | | VIBRATION | | | | | | | | | |
|--|-----------------------|--|----------------------------|---------------|--|--------------------------------|---------------|--|---------------------------|--|--|
| 81 dB Operator | 77dB At 3m | 4.8 m/s² At Operators Handle | | | | | | | | | |
| <p>Tests were conducted on 6/14/00 with calibrated sound and vibration equipment under the conditions noted below:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">General Condition: Indoors</td> <td style="width: 33%;">Wind: 0 km/hr</td> <td style="width: 33%;"></td> </tr> <tr> <td>Temperature: 23^oC</td> <td>Humidity: 70%</td> <td></td> </tr> <tr> <td>Barometric Pressure: 29.1</td> <td></td> <td></td> </tr> </table> | | | General Condition: Indoors | Wind: 0 km/hr | | Temperature: 23 ^o C | Humidity: 70% | | Barometric Pressure: 29.1 | | |
| General Condition: Indoors | Wind: 0 km/hr | | | | | | | | | | |
| Temperature: 23 ^o C | Humidity: 70% | | | | | | | | | | |
| Barometric Pressure: 29.1 | | | | | | | | | | | |



Jeff Pollack, Standards Engineer



Date

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IMPORTANT SAFETY INSTRUCTIONS

CAUTION

Operators must read and understand this manual before operating or maintaining this equipment.

- Keep hands and feet clear of moving parts while machine is in operation.
- All switches must be in the “OFF” position when charging batteries.
- Electrical motors and components can cause an explosion when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dusts, etc.
- Make sure all switches are turned “OFF” and battery connections are removed before performing any maintenance procedures.
- Store or park this machine on a level surface only.
- These machines are designed for level floor operation only. DO NOT OPERATE on ramps or inclines.
- Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.
- This machine is not suitable for picking up hazardous dust.

Charging batteries generates explosive gases. DO NOT CHARGE BATTERIES WHEN OPEN FLAMES OR SPARKS ARE PRESENT. DO NOT SMOKE. Make sure the charger is turned off before disconnecting it from the batteries. Charge the batteries in a well-ventilated area.

Maintenance and repairs must be performed by authorized personnel.

SAVE THESE INSTRUCTIONS

ELECTRICAL REQUIREMENTS:

This piece of equipment operates on 24 Volt DC.

BATTERY REQUIREMENTS:

2 x 12V 210 Amp Hour 20 Hour Rate Deepcycle P/N 956210

BATTERY SERVICE AND INSTALLATION:

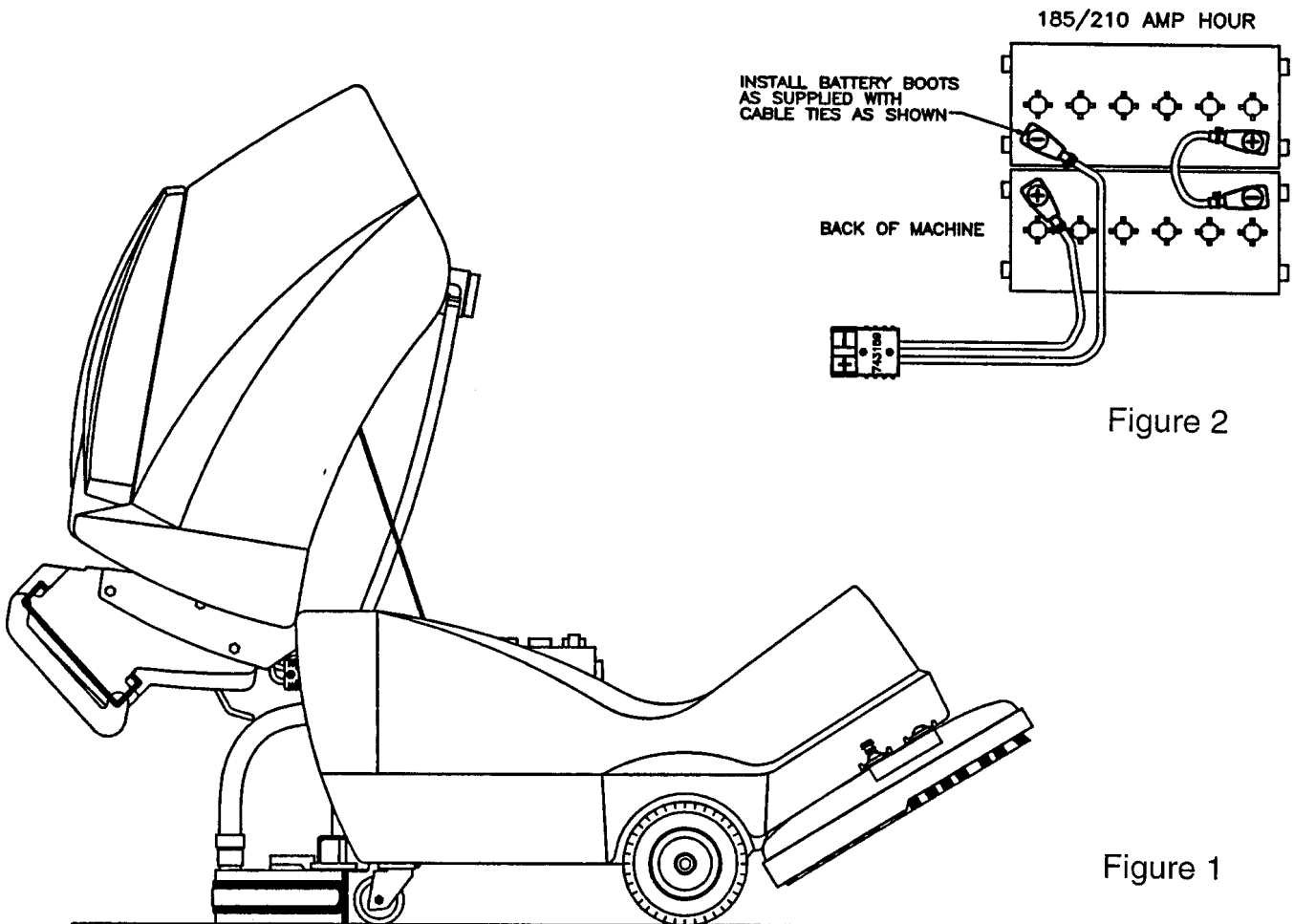
Warning: Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.

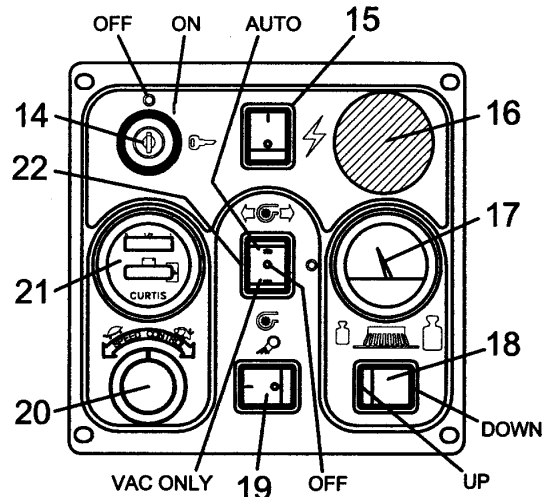
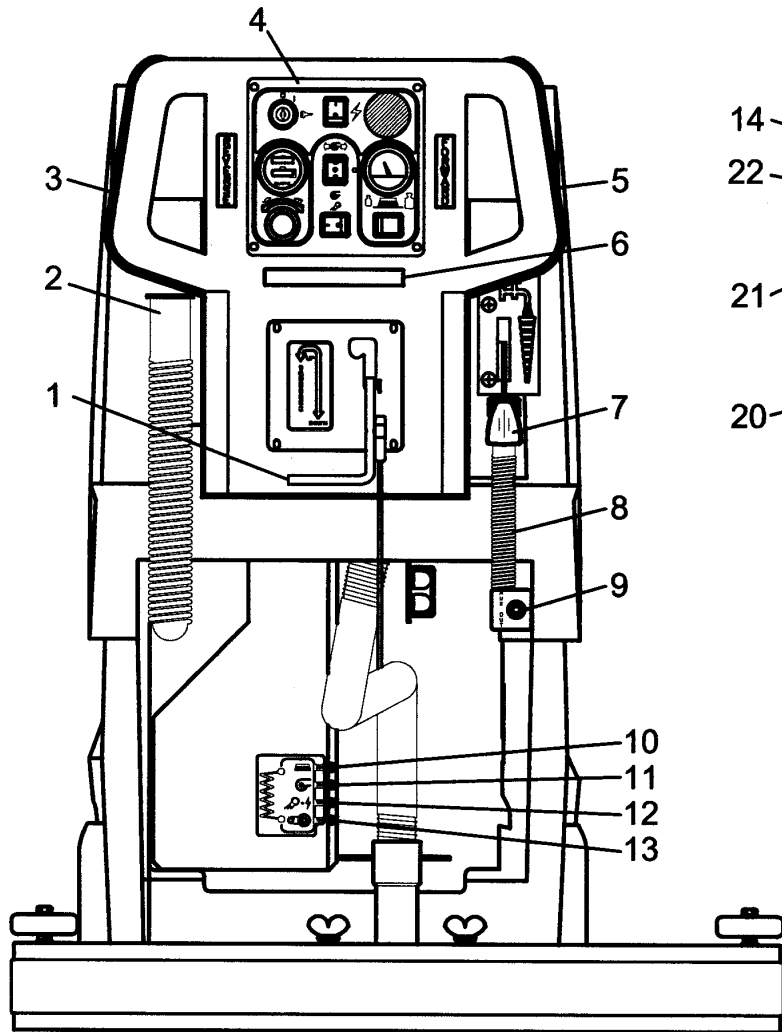
BATTERY INSTALLATION:

1. Raise tank assembly by gripping the front of tank and lift tank backward as shown in Fig. 1.
2. Install batteries as shown in Figure 2.

CHARGING OF BATTERIES:

Charging of batteries generates explosive gases. DO NOT CHARGE BATTERIES WHEN OPEN FLAMES OR SPARKS ARE PRESENT. DO NOT SMOKE. Make sure the charger is turned off before disconnecting it from the batteries. Charge the batteries in a well-ventilated area. Fluid levels should be checked before and after charging and maintained at the proper levels.





1. Squeegee lift lever
2. Recovery dump hose
3. Reverse handle
4. Dashboard control panel
5. Forward handle
6. Safety bar switch
7. Solution control lever
8. Solution dump hose
9. Quick disconnect - Aux. out (Deluxe only)
10. Circuit breaker - Brush
11. Circuit breaker - Vac
12. Circuit breaker - System
13. Circuit breaker - Transaxle
14. Keyswitch
15. Main power
16. Emergency button
17. Brush pressure gauge
18. Brush control
19. Pump switch
20. Speed control
21. Battery condition meter
22. Vacuum control switch

AUTO SCRUBBER BRUSH DESCRIPTION

| TYPE | DESCRIPTION | DURABILITY* | COLOR | COMPARISON TO PADS | RECOMMENDED USE |
|-------------|--|-------------|------------|--------------------|--|
| Bassine | Natural Fiber | Short | Dark Brown | Red | Light duty general cleaning, acid etching |
| Nylon | Nylon | Medium | Black | Tan/Red | General cleaning & scrubbing vinyl floors, ceramic tile & concrete floors |
| Dyna-Scrub | Nylon impregnated with 500 Grit Silicon Carbide Fine Bristle, Dense Fill | Long | Light | Red | General scrubbing, vinyl tile, ceramic tile, epoxy floors, urethane finish, uneven concrete floors |
| Power-Scrub | Nylon impregnated with 120 Grit Silicon Carbide Fine Bristle, Dense Fill | Long | Rust | Red/Blue | Moderate aggressive scrubbing, tile floors, concrete floors |
| Poly-Grit | Nylon impregnated with 80 Grit Silicon Carbide Coarse Bristle | Long | Green | Brown/Black | Aggressive stripping and scrubbing, tile floors, unfinished concrete floors |
| Strata-Grit | Nylon impregnated with 46 Grit Silicon Carbide Coarse Bristle | Long | Dark Blue | Black | Heavy duty stripping/scrubbing unfinished concrete |

• Durability is dependent on floor surface, chemicals used and proper care.

OPERATING INSTRUCTIONS

BEFORE STARTING, FAMILIARIZE YOURSELF WITH THE MACHINE AND ITS CONTROLS (SEE MACHINE OVERVIEW & CONTROL PANEL DIAGRAMS)

1. Filling: Fill the solution tank with the desired amount of water and add liquid cleaning solution to the proper dilution ratio. DO NOT USE powdered cleaning chemicals. Powders are unlikely to dissolve thoroughly, resulting in clogging the in-line solution filter. This can reduce or stop water flow to the brush.
2. Close lid.
3. Turn on machine by lifting the red emergency disconnect button (17) so it is in the up position. Turn keyswitch (15) clockwise to “on” position and turn on main power switch (16).
4. Adjust main speed control (21) to full counter-clockwise position.
5. Lower brush assembly.
 - To lower the brush, first push the pedal (10) slightly outward on the machine (unlock it), and then release it slowly or by pressing “brush down” switch (19) on Deluxe models.
 - To lift the brush, press the pedal (10) down until lift mechanism engages or by pressing “brush up” switch (19) on Deluxe models.
 - Brush will come on automatically when brush in on the floor and “forward” (5) or “reverse” (3) handles are squeezed and remain on approximately 5 seconds after release.
6. Adjust solution control feed lever.
7. Select vacuum operations:
 - “Vacuum On” mode (23) - Vacuum will remain on until switched to the “off” position
 - “Vacuum Auto” mode (23) - Vacuum will come on automatically when “forward” or “reverse” handle is squeezed, and scrubhead is on the floor. The brush and vacuum will remain on approximately 5 minutes.
8. Lower squeegee assembly by lowering handle (1).
9. Squeeze “forward” handle (5) and adjust forward speed (21) as desired.

After Use:

1. Turn off solution feed.
2. Raise squeegee assembly.
3. Turn off vacuum motor.

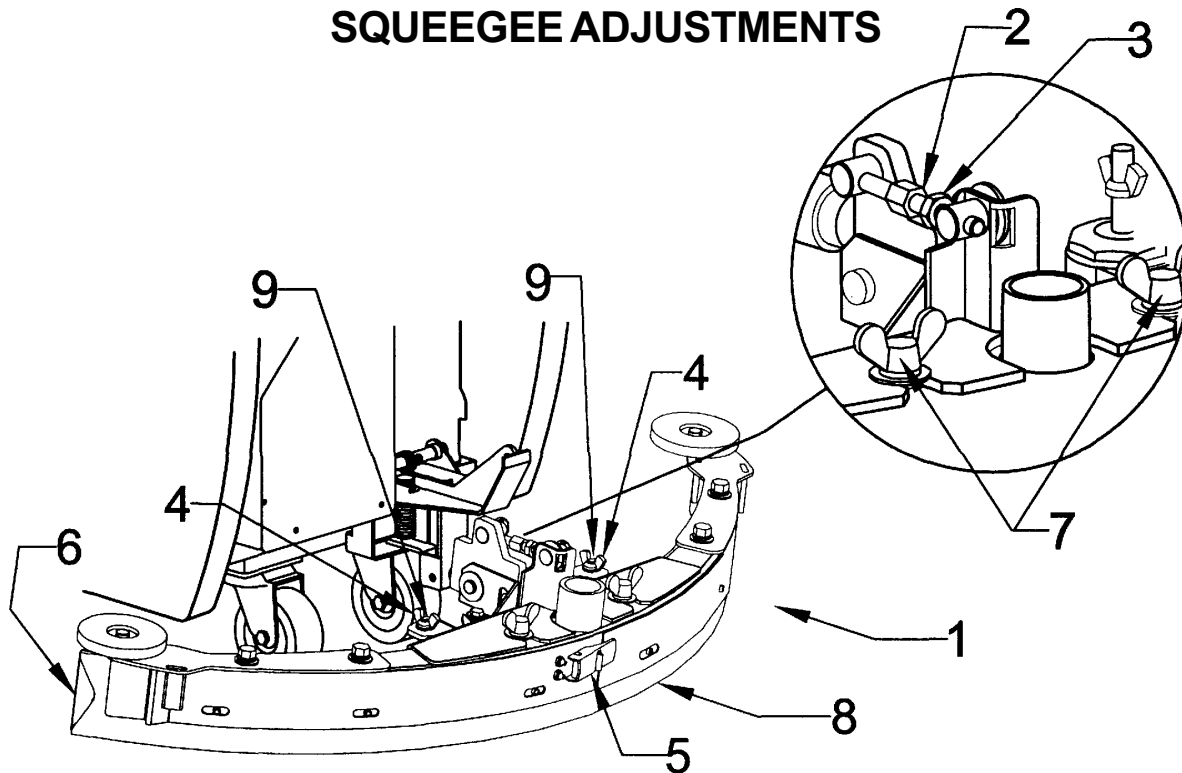
Solution and recovery tanks should be emptied after every use.

MAINTENANCE:

- | | |
|---------|--|
| Daily | 1. Clean float assembly & squeegee blades. Vac filter |
| | 2. Recharge batteries (check battery acid levels before and after charging). |
| Monthly | 1. Check wear on squeegee blades. |
| | 2. Grease front wheels. |
| | 3. Grease pivot points on brush motor assembly. |

Every 500 hours check condition of carbon brushes on vacuum motor and brush drive motor.

SQUEEGEE ADJUSTMENTS



The squeegee set-up is pre-adjusted at the factory. Adjustments may be required to get optimum performance for different floors and conditions.

1. Ensure that the scrubber is on a relatively flat surface. Turn on the main power switch and turn the key switch clockwise to the on position. Raise the scrubhead off the floor. Turn the vacuum switch to the “vacuum only” position.
2. Turn the speed control knob counter-clockwise to the low speed position. Lower the squeegee (item 1) to the floor and squeeze the forward control handle, move the machine one or two feet forward to check the rear squeegee blade (item 8) for uniform deflection to the floor.
3. If uneven deflection or lay is evident, minor adjustments may be necessary to avoid streaking and uneven wear on the blade.
4. To correct this, loosen the wing jam nut (item 4) in order to adjust the caster height. If the squeegee blade is deflecting too much, the casters need to be lowered to control the down pressure. Lower the caster by turning the exposed threaded stem (item 9) on the caster clockwise. Make the adjustment a few turns at a time. Repeat step 2.
5. If the blades are not deflecting enough, raise the caster by turning the stem counter clockwise to adjust the caster height to allow more down pressure on the squeegee. Repeat step 2.
6. Make sure that there is even deflection on the entire length of the rear blade. Adjust the casters and retighten the wing jam nuts to lock the caster setting in place.
7. Pitch adjustment is necessary if the outer ends on the squeegee blade do not contact the floor and there is too much deflection in the middle area or if the outer ends are over deflected and there is no contact in the middle.
8. To adjust the pitch, lower the squeegee to the floor. Loosen the lock nut (item 3) in the turnbuckle assembly. Turning the turnbuckle (item 2) clockwise or counter clockwise controls the forward and backward pitch of the squeegee. Having the rear blades deflected uniformly along the entire length is the desired setup. Repeat step 2 until the desired setup is achieved.
9. In certain applications where a non slotted front wiper blade (item 6) is needed, detach the squeegee assembly by loosening the wing bolts (item 7). Unlock the clamp on the front squeegee to release the straps and flip the blade over to the non slotted side. Reattach straps and lock the clamp back in place.
10. You can also easily replace the rear blade by unlatching the latch (item 5) and removing the straps by sliding them off the assembly.

BRUSH INSTALLATION - REMOVAL

INSTALLATION

1. Raise the scrubhead to the "UP" position by pressing the switch "BRUSH UP" (B) switch as shown on Fig. 2 until the scrubhead stops retracting upwards.
2. Hold brush under the scrubhead casting while lining up the center of brush with the hex drive hub and pressing the brush up until the brush engages on the hub.

REMOVAL

1. Raise the scrubhead to the "UP" position by pressing the switch "BRUSH UP" (B) switch as shown on Fig. 2 until the scrubhead stops retracting upwards.
2. Flip the handle up (Fig. 1) located at the middle of the plastic shroud. Push the handle towards the machine and the bracket underneath the casting will release both brushes at once. Replace handle in parked position.

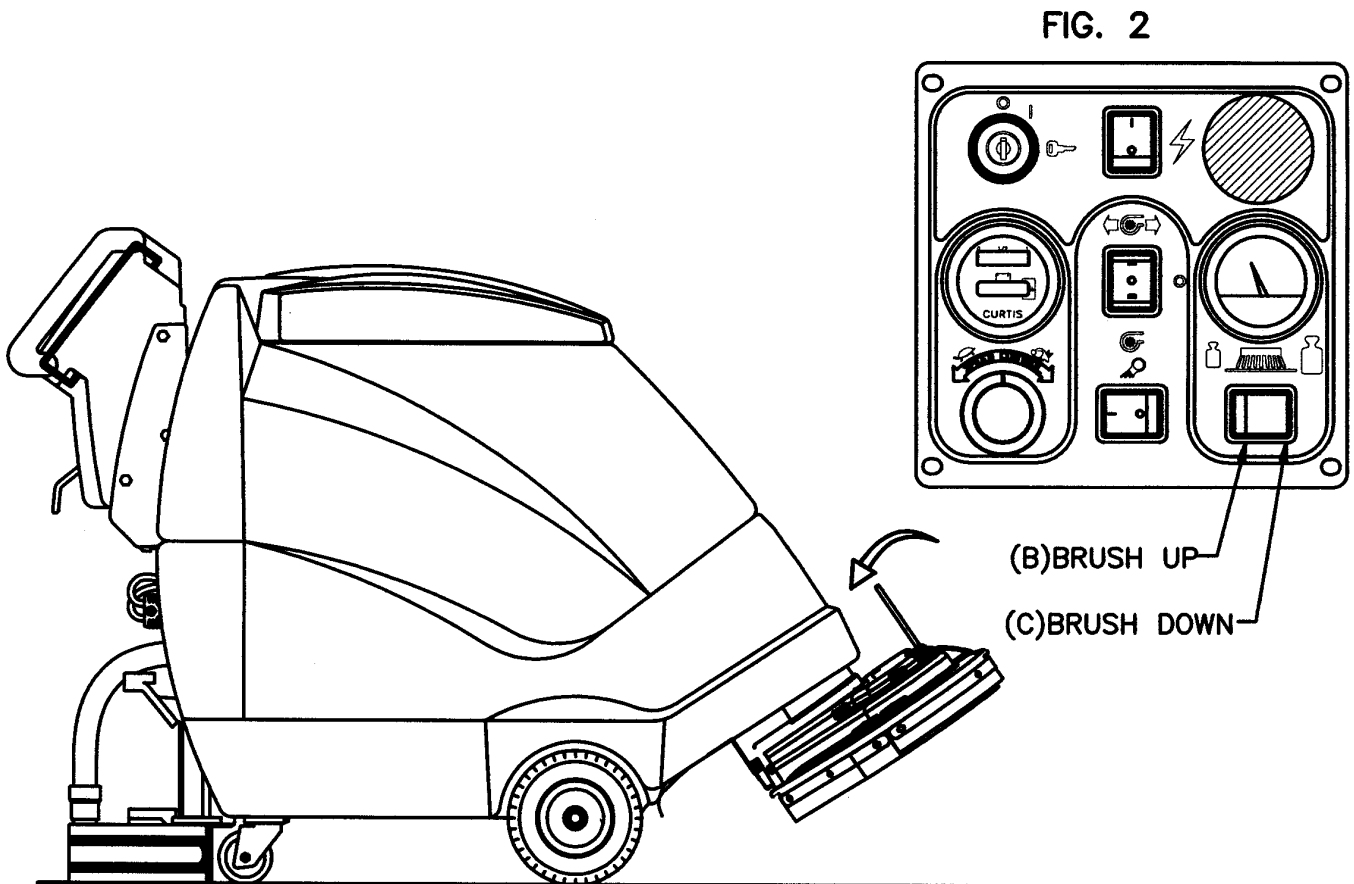
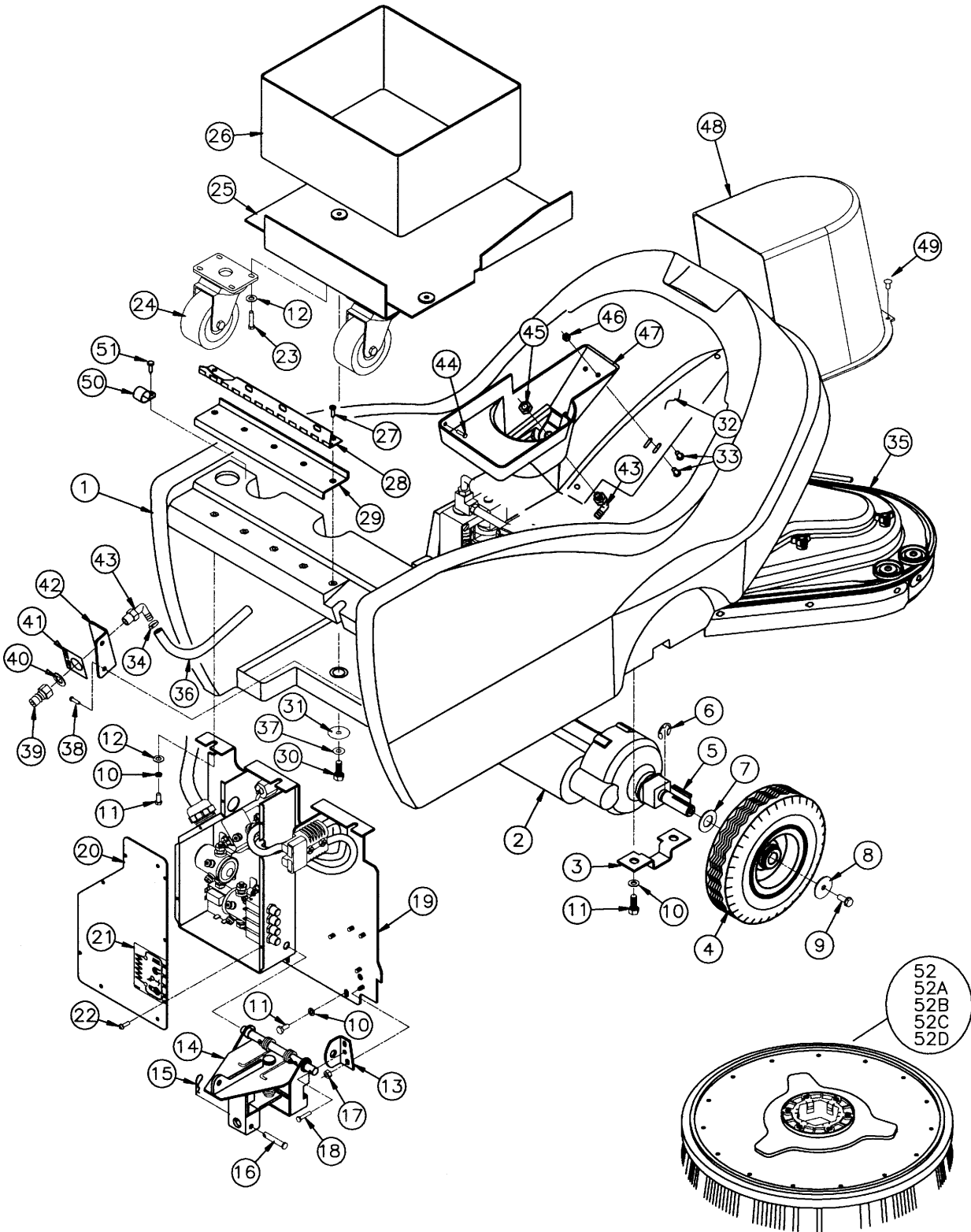


Figure 1

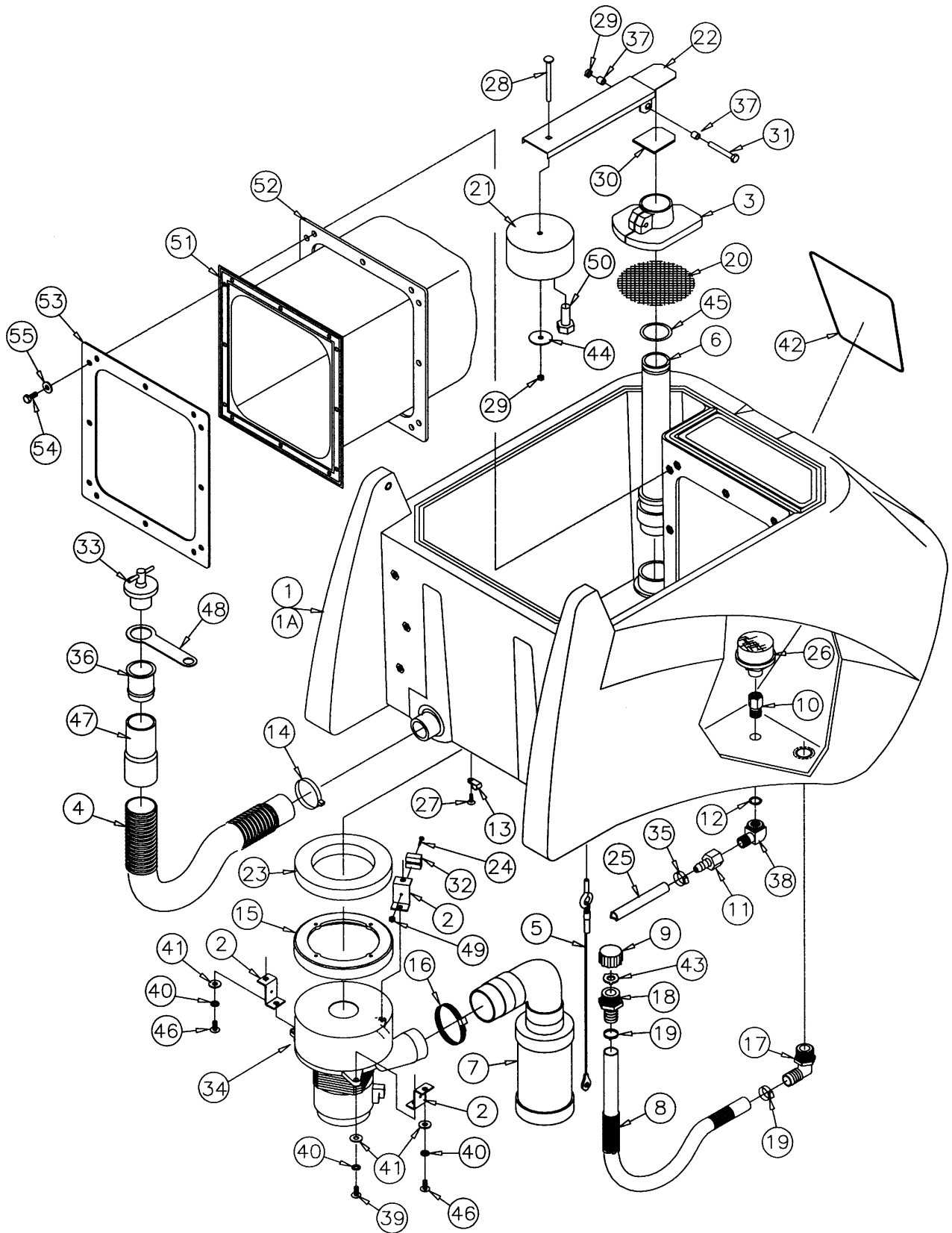
BASE ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|----------|------|-------------------------------|
| 1 | 200102 | 1 | Base |
| 2 | 743506 | 1 | Transaxle 24V |
| 3 | 200126 | 2 | Transaxle Mount |
| 4 | 200172 | 2 | Tire, Pneumatic |
| 5 | 361233 | 2 | Key 3/16 sq. x 1.50 |
| 6 | 809148 | 2 | E-Ring 3/4 |
| 7 | 712318 | 2 | WSR-Flat 3/4 x 1.12 x .12 |
| 8 | 712759 | 2 | WSR-Flat 5/16 x 1.37 x .06 SS |
| 9 | 712042 | 2 | Bolt-WSR HH 5/16-18 x .62 |
| 10 | 711544 | 19 | WSR-Helical 1/4 |
| 11 | 711203 | 19 | BLT-HH 1/4-20 x .62 |
| 12 | 711505 | 11 | WSR-Flat 1/4 |
| 13 | 200158 | 1 | Pin Bracket |
| 14 | 200153 | 1 | Squeegee Mechanism Assy. |
| 15 | 711808 | 1 | Cotter Pin |
| 16 | 210415 | 1 | Clevis Pin 5/16 |
| 17 | 260183 | 3 | Nut 1/4 NPT Nyloc |
| 18 | 712564 | 1 | Bolt-HH 1/4-20 x 1 SS |
| 19 | 200175 | 1 | Back Panel Assy. |
| 20 | 200154 | 1 | Electrical Box Cover |
| 21 | 715286 | 1 | Decal, CB |
| 22 | 711125 | 4 | SCR-ST-B #10 x 1/2 |
| 23 | 713002 | 8 | BLT-HH 1/4-20 x .75 |
| 24 | 200345 | 2 | Caster, 3 1/2" |
| 25 | 200125 | 1 | Battery Tray Weldment |
| 26 | 210048 | 1 | Battery Liner |
| 27 | 712565 | 5 | SCR-MC 1/4 - 20 x .62 SS |
| 28 | 200145 | 1 | Hinge |
| 29 | 200146 | 1 | Hinge Plate |
| 30 | 711228 | 4 | Bolt-HH 5/16-18 x 3/4 |
| 31 | 711507 | 4 | WSR-Flat .37 x 1.12 x .06 |
| 32 | 200233 | 1 | Bottom Cover |
| 33 | 712822 | 3 | SCR-THMS 10-24 x 1/2 |
| 34 | 450076 | 2 | Crimp Clamp 185R SS |
| 35 | 200500 | 1 | Scrubhead Asm 240X |
| 36 | 200236 | 1 | Auxilliary Hose 48.50 |
| 37 | 711545 | 4 | WSR-Helical 5/16 |
| 38 | 711161 | 2 | Hi/Lo Screw #10 x 3/4 |
| 39 | 828368 | 1 | Male Coupler BH2-61 |
| 40 | 711594 | 1 | WSR-Flat .56 x .88 x .03 |
| 41 | 715144 | 1 | Decal Aux Pump |
| 42 | 200237 | 1 | Quick Disconnect Bracket |
| 43 | 833325 | 2 | Barb 90° Elbow 3/8 x 1/4 NPT |
| 44 | 711160 | 1 | SCR Hi/Lo #10 x 5/8 |
| 45 | 260183 | 1 | Nut-Nylon 1/4 NPT |
| 46 | 712908 | 3 | Nut-Wizz 10-24 |
| 47 | 200318 | 1 | Reservoir |
| 48 | 200523 | 1 | 240X Motor Cover |
| 49 | 710178 | 2 | SCR-MC 1/4-20 x .50 Truss |
| 50 | 82-54-A | 1 | Clamp |
| 51 | 711106 | 1 | SCR-ST-A 10 x .75 PL |
| 52 | 260002-1 | 2 | Pad Driver, No Riser |
| 52A | 260003 | 2 | Bassine Brush |
| 52B | 260004 | 2 | Nylon Brush |
| 52C | 260005 | 2 | Poly-Grit Brush |
| 52D | 260006 | 2 | Strata-Grit Brush |

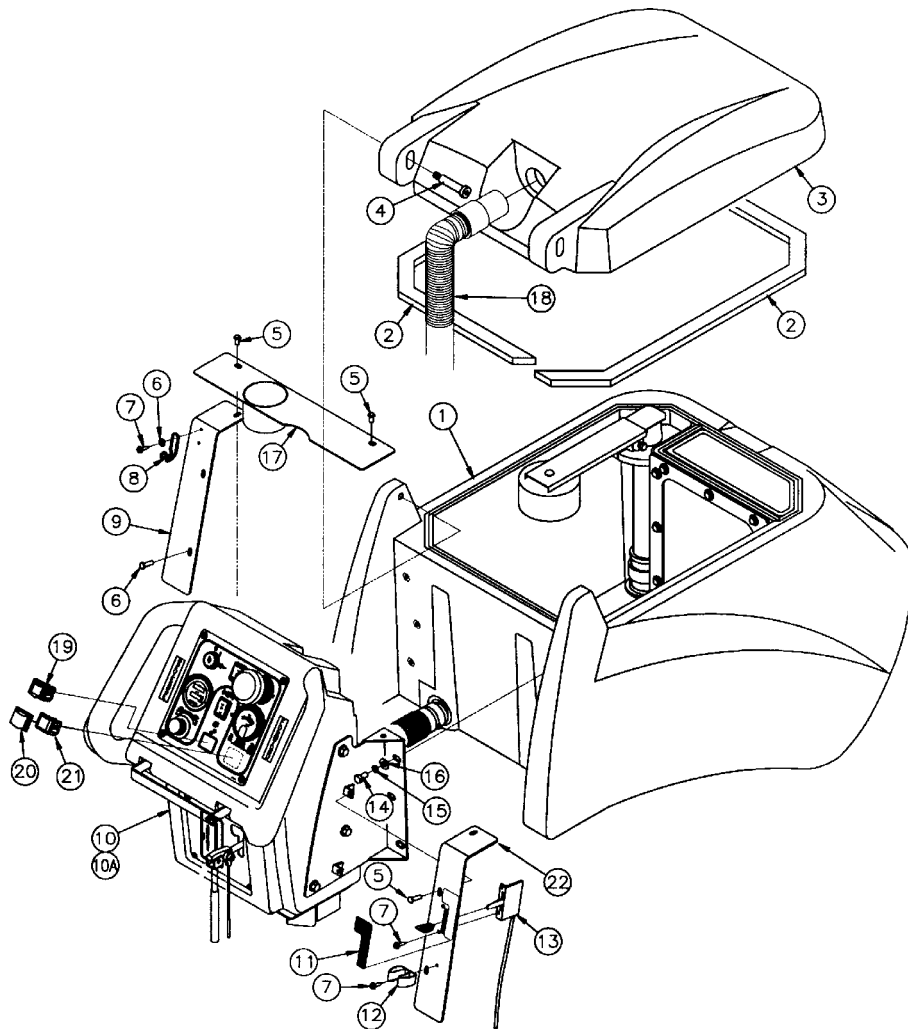
TANK ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|-----------|------|--------------------------------|
| 1 | 200101MCH | 1 | Sol/Rec Tank |
| 2 | 200147 | 3 | Bracket, Vac Motor |
| 3 | 200173 | 1 | Float, Housing |
| 4 | 210122 | 1 | Drain Hose, Wirelock |
| 5 | 200232 | 1 | Cable, Tank |
| 6 | 200251 | 1 | Stand Pipe Assembly |
| 7 | 200258 | 1 | Muffler Assembly |
| 8 | 200270 | 1 | Hose, 3/4 Solution Drain |
| 9 | 200023 | 1 | Garden Hose Cap |
| 10 | 210409 | 1 | Fitting, Brass 3/8MPT |
| 11 | 210410 | 1 | Fitting, Brass 3/8FPT |
| 12 | 210414 | 1 | "O" Ring 2-113 |
| 13 | 250038 | 3 | Retainer Clip |
| 14 | 260203 | 1 | Hose Clamp, 102120 Murray |
| 15 | 290017 | 1 | Gasket, Molded, Vac Motor |
| 16 | 760859 | 1 | Clamp-Hose |
| 17 | 383321 | 1 | Elbow 3/4MPT 3/4BARB PP |
| 18 | 200022 | 1 | 3/4" MGHT x Hose Barb |
| 19 | 829129 | 2 | Clamp, Crimp 3/4 Hose |
| 20 | 430050 | 1 | Filter Screen |
| 21 | 260155 | 1 | Foam Float |
| 22 | 200320 | 1 | Shut Off Weldment |
| 23 | 460019 | 1 | Gasket 3.75 x 5.75 x .75 |
| 24 | 710207 | 1 | SCR-MC 6-32 x .87 ST PL |
| 25 | 200234 | 2 | Solution Hose |
| 26 | 130118 | 1 | Solution Strainer |
| 27 | 712540 | 3 | SCR-MC #10-24 x .375 SS |
| 28 | 712574 | 1 | CR Bolt SS 1/4-20 x 3" |
| 29 | 712667 | 2 | Nut-Hex 1/4-20 SS Nyloc |
| 30 | 200321 | 1 | Gasket, Shut Off |
| 31 | 712568 | 1 | SCR-MC 1/4-20 x 2.25 SS |
| 32 | 832996 | 1 | Terminal Black 2 Pole VDE |
| 33 | 833316 | 1 | Drain Plug |
| 34 | 740225 | 1 | Vac Motor 6515-13 24V |
| 35 | 760245 | 2 | Hose Clamp 62P24 |
| 36 | 760343 | 1 | Tube Hose 24/32B |
| 37 | 762384 | 2 | Bushing .277 x .375 x .37 SS |
| 38 | 830062 | 1 | Fitting Brass 90 3/8MPT |
| 39 | 710180 | 3 | SCR-MC 1/4-20 x .75 |
| 40 | 711544 | 6 | Lockwasher-Helical 1/4 |
| 41 | 711505 | 6 | Washer 1/4 |
| 42 | 715295 | 1 | Decal, 240X |
| 43 | 200024 | 1 | Black Vinyl Washer |
| 44 | 712759 | 4 | WSR-Flat .31 x 1.37 x .06 SS |
| 45 | 310008 | 1 | O-Ring (included in 200251) |
| 46 | 712565 | 3 | SCR-MC 1/4-20 x .625 SS |
| 47 | 805613 | 1 | Hose Cuff, Grey Vinyl |
| 48 | 320269 | 1 | Strap, Drain Plug Retaining |
| 49 | 711301 | 1 | Nut-Hex 6-32 ST PL |
| 50 | 712010 | 2 | BLT-Hex 1/2-13 x 1.25 STL Zinc |
| 51 | 200106 | 1 | Bladder Bag |
| 52 | 200267 | 1 | Gasket, Bladder |
| 53 | 200189 | 1 | Frame, Bladder |
| 54 | 712562 | 12 | SCR-MC HH 1/4-20 x .75 SS |
| 55 | 711504 | 12 | Washer 1/4 SS |

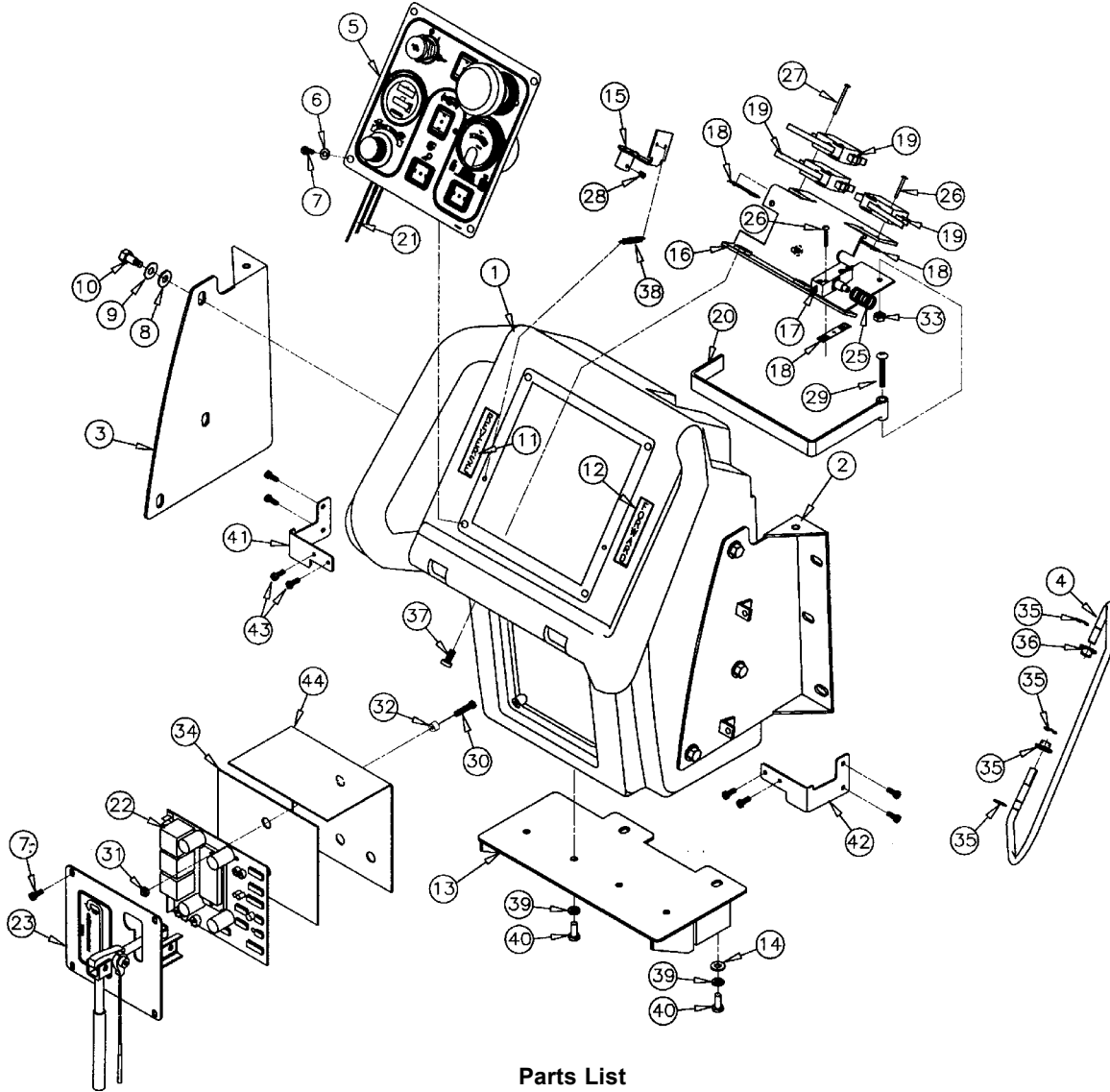
UPPER ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|----------|------|------------------------------|
| 1 | 200275 | 1 | Tank Assy. - Deluxe |
| 2 | 200178 | 2 | Gasket, Lid |
| 3 | 200103 | 1 | Tank Lid |
| 4 | 712120 | 2 | Shoulder Bolt 1/2 x 2 |
| 5 | 710178 | 6 | SCR-MC 1/4-20 x 1/2 |
| 6 | 711503 | 2 | WSR-Flat #10 |
| 7 | 711125 | 5 | SCR-ST-B #10 x 1/2 |
| 8 | 760286 | 1 | Wire Formed Hook |
| 9 | 200176 | 1 | Dump Hose Bracket |
| 10 | 200180 | 1 | Console Assy. TD/Deluxe |
| 11 | 715284 | 1 | Decal, Solution Control |
| 12 | 383367 | 1 | Spring Clip |
| 13 | 430053 | 1 | Solution Control Cable |
| 14 | 711228 | 6 | Bolt-HH 5/16-18 x 3/4 |
| 15 | 711545 | 6 | WSR-Helical 5/16 |
| 16 | 711575 | 6 | WSR-Flat 5/16 |
| 17 | 200032 | 1 | Console Back Cover Weldment |
| 18 | 450054 | 1 | Vacuum Recovery Hose |
| 19 | 740711CE | 1 | Switch Dreefs w/Splashguards |
| 20 | 740811 | 1 | Switch Boot |
| 21 | 740800CE | 1 | Switch Momentary |
| 22 | 200152 | 1 | Solution Control Bracket |

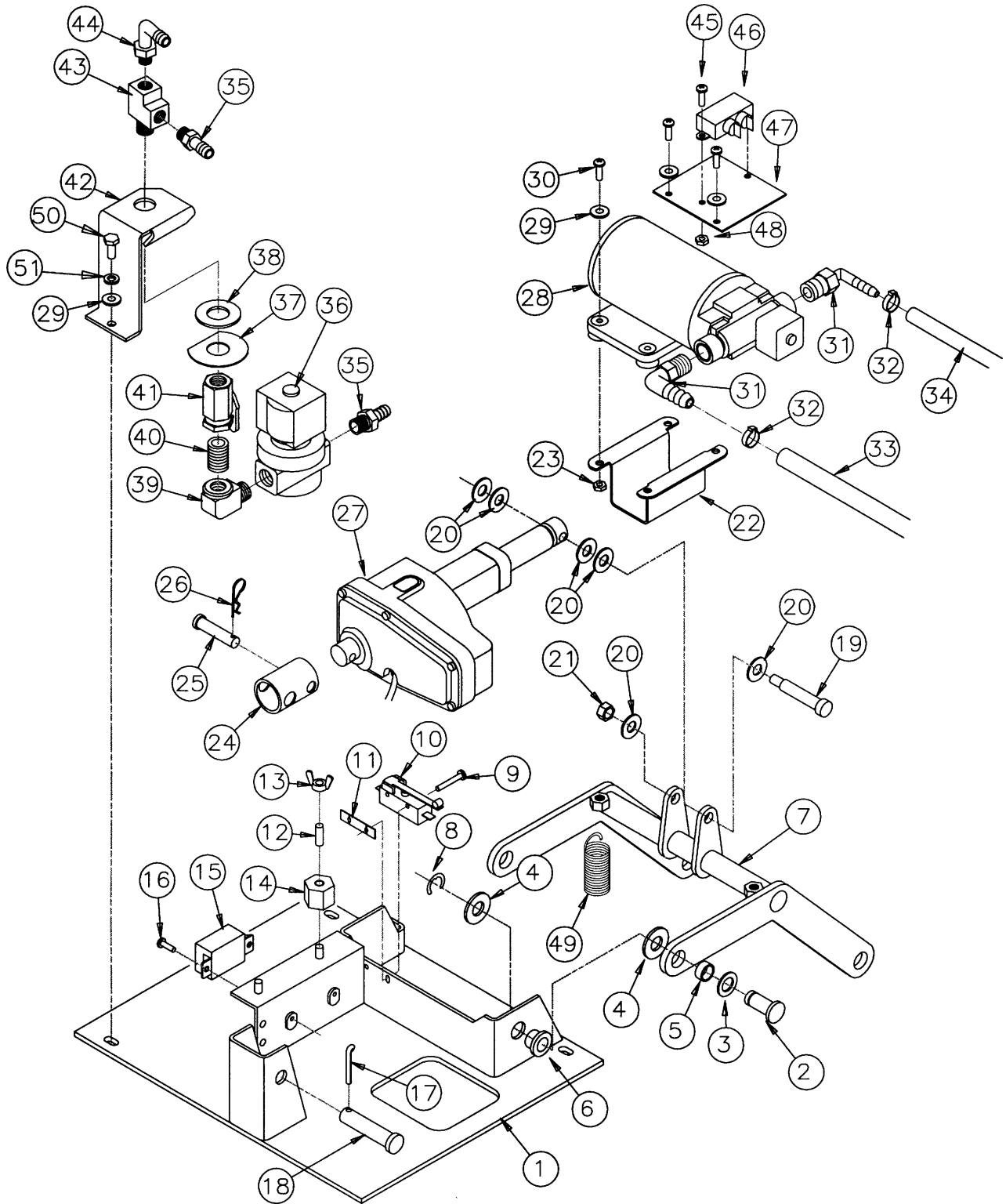
CONSOLE ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description | Item | Part No. | Qty. | Description |
|------|-----------|------|-----------------------------|------|----------|------|--------------------------|
| 1 | 200104MCH | 1 | Console Machined | 23 | 200240 | 1 | Squeegee Lift Assy. |
| 2 | 200134 | 1 | Console Bracket Right | 24 | 200241 | 1 | Squeegee Lift Cable |
| 3 | 200135 | 1 | Console Bracket Left | 25 | 670093 | 1 | Spring, Compression |
| 4 | 200181CTD | 2 | Handle Wire, Coated | 26 | 710307 | 4 | SCR-MC 6-32 x 1.00 ST PL |
| 5 | 200295 | 1 | Dashboard Assy. | 27 | 710312 | 2 | SCR-MC 6-32 x 1.75 ST PL |
| 6 | 712320 | 4 | WSR-Nylon .22 x .45 x .04 | 28 | 711004 | 2 | SCR-SK 1/4-20 x .25 SS |
| 7 | 712540 | 8 | SCR-MC #10-24 x .37 SS | 29 | 712569 | 1 | SCR-MC 1/4-20 x 1.50 SS |
| 8 | 711575 | 6 | WSR-Flat .31 x .75 x .06 | 30 | 710534 | 2 | SCR-MC #8-32 x 1" |
| 9 | 711545 | 6 | WSR-Helical 5/16 | 31 | 711372 | 2 | Nut, Nyloc #8-32 |
| 10 | 711228 | 6 | Bolt-HH 5/16-18 x .75 | 32 | 200340 | 2 | Spacer, S-C Board |
| 11 | 715258 | 1 | Decal, "Reverse" | 33 | 829052 | 1 | Nut, Hex 1/4-20 |
| 12 | 715257 | 1 | Decal, "Forward" | 34 | 805637 | 1 | SCR Insulator |
| 13 | 200151 | 1 | Hinge Bracket Weldment | 35 | 711721 | 6 | Retaining Ring .312 |
| 14 | 711505 | 2 | WSR-Flat 1/4 | 36 | 829052 | 4 | Bushing Flanged, Nylon |
| 15 | 200338 | 2 | Cam Weldment | 37 | 710180 | 2 | SCR-MC 1/4-20 x 1" |
| 16 | 200184 | 1 | Switch Bracket Weldment | 38 | 220324 | 2 | Spring |
| 17 | 742472 | 1 | Switch, McGill NC | 39 | 711544 | 6 | WSR-Helical 1/4 |
| 18 | 711430 | 3 | Nut-Tinnerman 6-32 | 40 | 711203 | 6 | Bolt-HH 1/4-20 x .62 |
| 19 | 833329SA | 3 | Switch, Staggered Action | 41 | 200039 | 1 | Bail Stop (RH) |
| 20 | 200190CTD | 1 | Lever, Switch, Coated | 42 | 200040 | 1 | Bail Stop (LH) |
| 21 | 743240 | 1 | Harness, 200 Console | 43 | 711160 | 8 | Screw Hi-Lo #10 x 5/8 PL |
| 22 | 740944-1 | 1 | Speed Control, 24V 1203A225 | 44 | 260210 | 1 | Moisture Guard SCR 260TD |

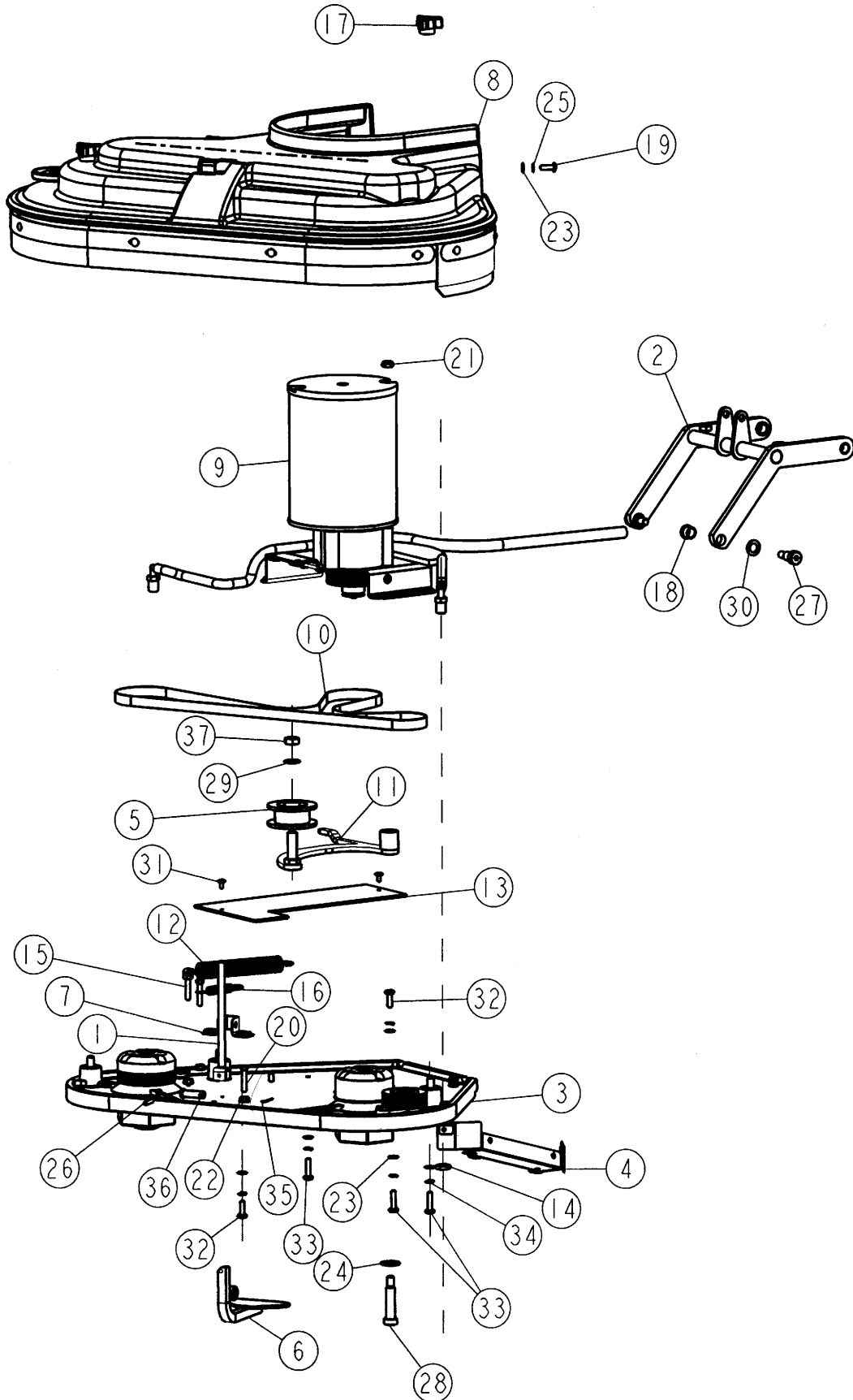
MOTOR LIFT ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|-----------|------|------------------------------|
| 1 | 200249 | 1 | Base Plate Weldment-Deluxe |
| 2 | 260036 | 2 | Pin Retainer |
| 3 | 712310 | 2 | WSR-Flat .52 x .88 x .06 |
| 4 | 711527 | 4 | WSR-Flat 5/8 x 1/12 x .12 |
| 5 | 762340 | 2 | Oilite Bushing 1/2 |
| 6 | 260041 | 2 | Oilite Flanged Bushing 1/2 |
| 7 | 200509 | 1 | Lift Arm Weldment-Deluxe |
| 8 | 711713 | 2 | E-Ring 1/2 |
| 9 | 710207 | 2 | SCR-MC 6-32 x .87 |
| 10 | 740128 | 1 | Microswitch |
| 11 | 711430 | 1 | Tinnerman Clip |
| 12 | 833638 | 2 | Brass Stud |
| 13 | 711368 | 2 | Wing Nut |
| 14 | 740132 | 2 | Insulator Glastic |
| 15 | 743032 | 1 | Terminal Block |
| 16 | 712822 | 2 | SCR-THMS 10-24 x 1/2 |
| 17 | 711807 | 1 | Cotter Hair Pin |
| 18 | 711672 | 1 | Clevis Pin 1/2 |
| 19 | 712126 | 1 | Shoulder Bolt 5/16 x 1.75 |
| 20 | 711515 | 6 | WSR-Flat .406 x .81 x .063 |
| 21 | 711374 | 1 | Nut-Nyloc 5/16-18 SS |
| 22 | 200174 | 1 | Pump Mounting Bracket |
| 23 | 712638 | 4 | Nut-Nyloc 10-24 SS |
| 24 | 200248 | 1 | Pivot Tube |
| 25 | 831965 | 1 | Clevis Pin 3/8 x 1.63 |
| 26 | 711808 | 1 | Cotter Pin |
| 27 | 743503 | 1 | Actuator |
| 28 | 833299 | 1 | Pump 100 PSI 24VDC |
| 29 | 711505 | 5 | WSR-Flat 1/4 |
| 30 | 712532 | 4 | SCR-MC 10-24 x 1 SS |
| 31 | 833325 | 2 | Elbow 3/8 Barb x 1/4NPT |
| 32 | 450076 | 2 | Crimp Clamp 185R |
| 33 | 200282 | 1 | Hose Pump Inlet |
| 34 | 200281 | 1 | Hose Pump Outlet |
| 35 | 342430 | 2 | Fitting 3/8 Barb x 3/8 MPT |
| 36 | 743505 | 1 | Water Solenoid 24V |
| 37 | 829463 | 1 | WSR-Flat SS |
| 38 | 828975 | 1 | WSR-Neoprene .75 x 1.5 x .09 |
| 39 | 830062 | 1 | 3/8 Street 90 Brass |
| 40 | 383332 | 1 | 3/8 Closed Nipple |
| 41 | 809413MCH | 1 | Solution Valve Machined |
| 42 | 200259 | 1 | Valve Bracket |
| 43 | 210408 | 1 | Fitting Brass Tee 3/8 NPT |
| 44 | 450040 | 1 | Elbow 3/8 Barb x 3/8 MPT |
| 45 | 710329 | 2 | SCR-MC 8-32 x .5 |
| 46 | 742391 | 1 | RFI Fliter |
| 47 | 200335 | 1 | RFI Bracket |
| 48 | 711372 | 2 | Nut-Nyloc 8-32 |
| 49 | 760594 | 2 | Spring, Extension |
| 50 | 711206 | 1 | BLT-HH 1/4-20 x .87 STL Zinc |
| 51 | 711544 | 1 | WSR-Helical 1/4 |

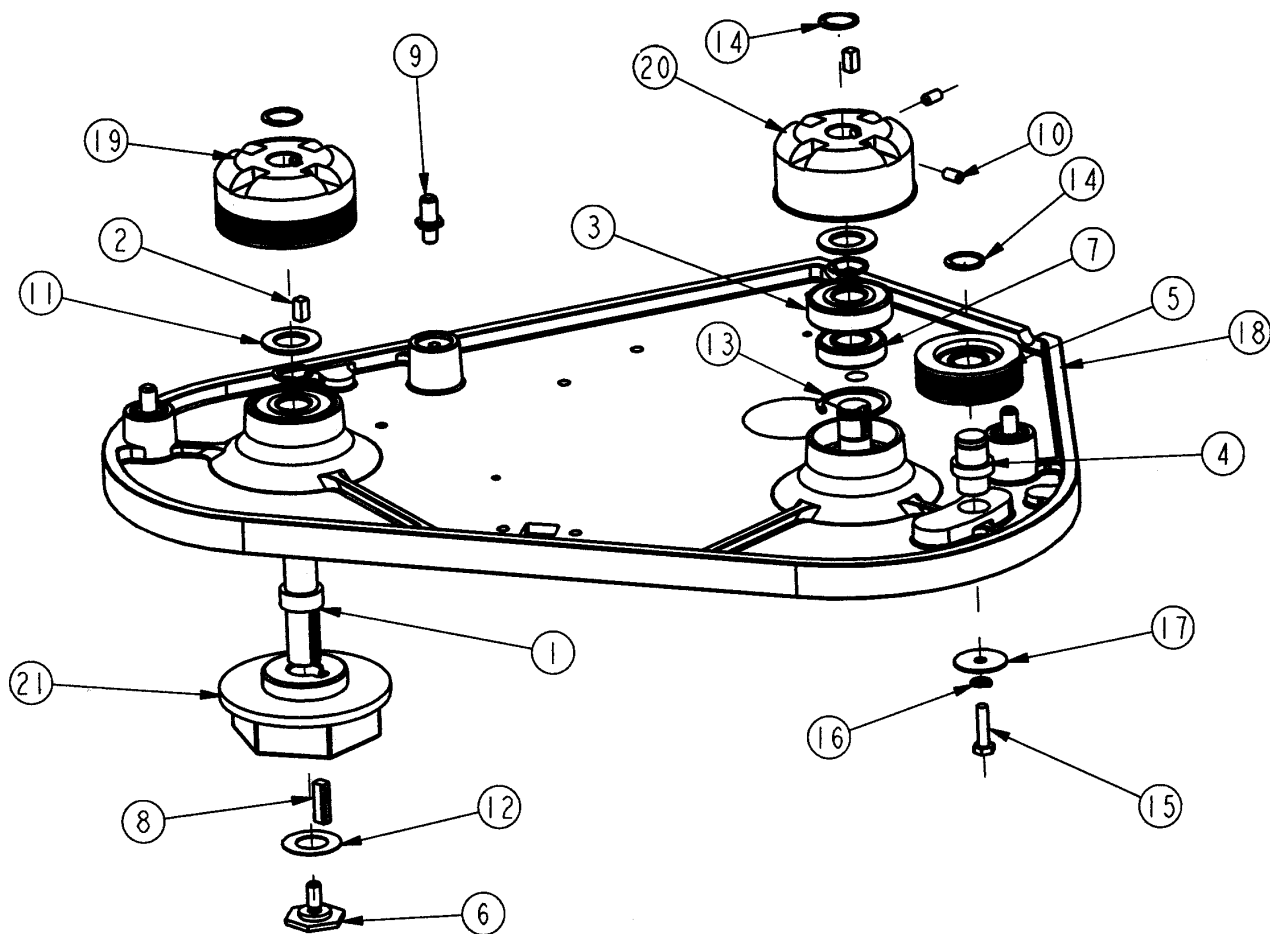
SCRUBHEAD ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|----------|------|-----------------------------------|
| 1 | 200038 | 1 | Handle Shaft Weldment |
| 2 | 200509 | 1 | 240X Lift Weldment |
| 3 | 200525 | 1 | Scrubdeck Casting Assy |
| 4 | 200530 | 1 | Spring Mount |
| 5 | 200531 | 1 | Belt Idler w/Bushing |
| 6 | 200545 | 1 | Brush Release Lever Weldment |
| 7 | 200548 | 1 | Bracket, Brush Release |
| 8 | 200570 | 1 | Cover Assy - 240X Scrubdeck |
| 9 | 200574 | 1 | Brush Motor Assy, 240X |
| 10 | 200579 | 1 | Belt, Brush Drive |
| 11 | 200586 | 1 | Idler Arm Weldment |
| 12 | 200588 | 1 | Extension Spring .875 OD x 6.00 |
| 13 | 200589 | 1 | Idler Arm Liner |
| 14 | 260183 | 2 | Nut 1/4 Npt Nylon, Half |
| 15 | 260292 | 1 | Swing Bolt 1/4-20 |
| 16 | 430051 | 1 | Return Spring 3.00" |
| 17 | 430074 | 3 | Adjusting Nut 17B/E |
| 18 | 670117 | 2 | Oilite Flanged Bushing |
| 19 | 710180 | 2 | SCR-MC 1/4-20 x .75 TR HD |
| 20 | 711210 | 2 | BLT-HH 1/4-20 x 1.25 STPL |
| 21 | 711375 | 1 | Nut-Nyloc 3/8-16 x 1/2 Nut |
| 22 | 711425 | 3 | Nut, Hex 1/4-20 Wiznut |
| 23 | 711504 | 10 | WSR-Flat 1/4 ID SS |
| 24 | 711509 | 1 | WSR-Flat 1/2 (.54 x 1.082 x .087) |
| 25 | 711564 | 2 | WSR-External Lock 1/4 |
| 26 | 711642 | 1 | Roll Pin .187 x 1.00 |
| 27 | 712122 | 2 | BOLT-SHLDR 1/2 x 5/8 |
| 28 | 712132 | 1 | BOLT-SHLDR 1/2 x 1-3/4" |
| 29 | 712301 | 1 | WSR-Flat .87 x .38 x .06 |
| 30 | 712310 | 2 | WSR-Flat .52 x .87 x .06 PL |
| 31 | 712540 | 2 | SCR-MC 10-24 SS TH |
| 32 | 712562 | 4 | BLT-HH 1/4-20 x 3/4 SS |
| 33 | 712564 | 4 | BLT-HH 1/4-20 x 1.00 SS |
| 34 | 712758 | 8 | WSR-Helical 1/4 SS |
| 35 | 809311 | 1 | Pin Cotter 7/64 Dia x 1 |
| 36 | 833833 | 1 | Clevis Pin |
| 37 | 364-816 | 1 | 1/2-13 Nyloc Half Nut |

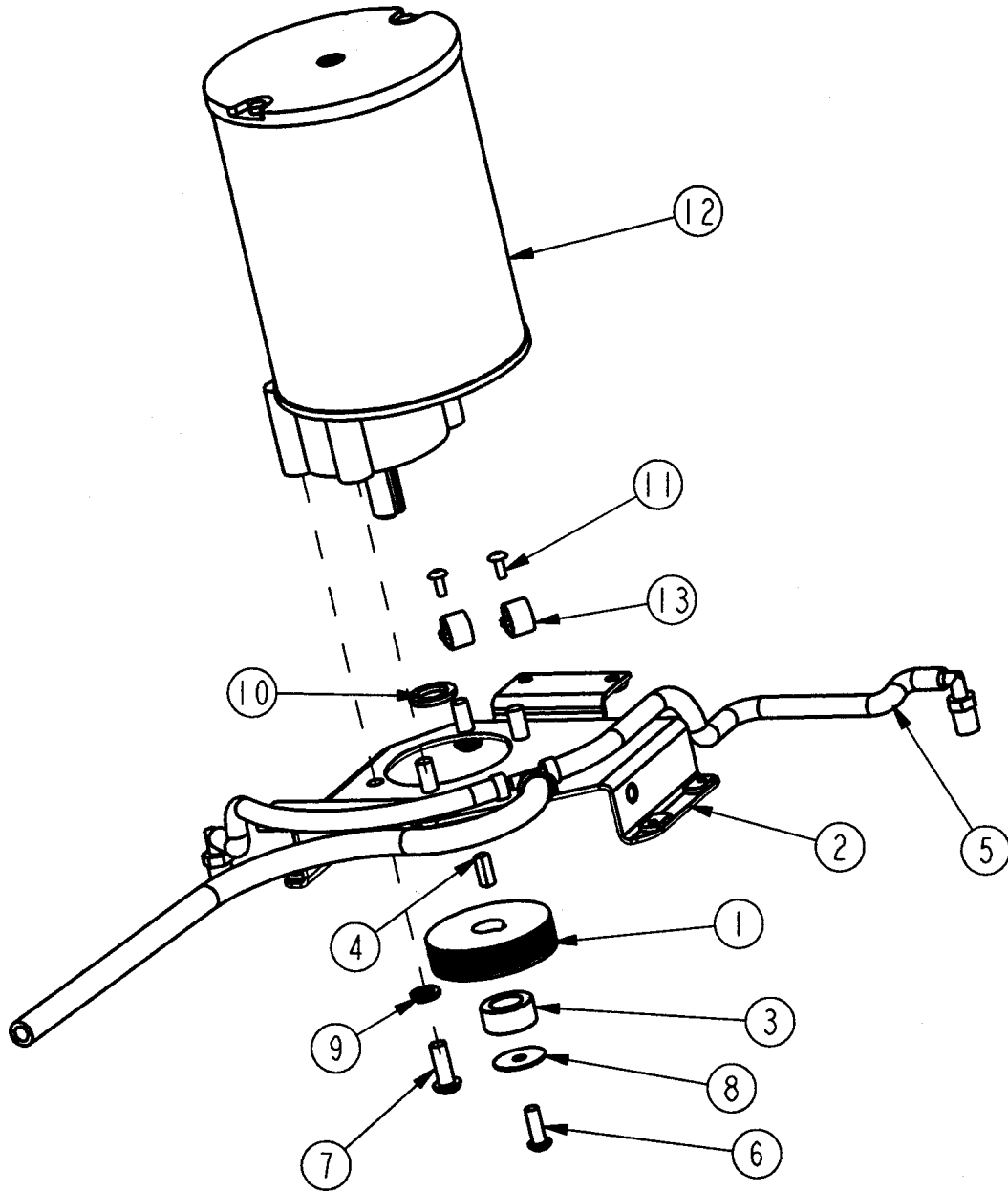
CASTING ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|-----------|------|--------------------------------------|
| 1 | 200514 | 2 | Shaft Driven |
| 2 | 200527 | 2 | Key 1/4 x 1/4 x 1/2 |
| 3 | 200532 | 2 | Bearing |
| 4 | 200566 | 1 | Idler Pin |
| 5 | 200578 | 1 | Pulley Bearing Assy |
| 6 | 210066 | 2 | Drive Hub Retainer Bolt |
| 7 | 250016 | 2 | Bearing |
| 8 | 833621 | 2 | Key 1/4 x 1/4 x 1.00 |
| 9 | 430075 | 3 | Threaded Insert |
| 10 | 711016 | 4 | SCR-SK 1/4-20 x .50 - Cup Pt Set SCR |
| 11 | 711512 | 2 | WSR-Flat .75 x 1.37 x .08 |
| 12 | 711517 | 2 | WSR-Flat .75 x 1.375 x .09 SS |
| 13 | 711702 | 2 | Retaining Ring, Int. 1.62 |
| 14 | 711715 | 5 | Retaining Ring, Axt 1.00 |
| 15 | 712564 | 1 | Bolt-HH 1/4-20 x 1.00 SS |
| 16 | 712758 | 1 | WSR-Helical 1/4 SS |
| 17 | 712761 | 1 | WSR-Flat .28 x 1.25 x .059SS |
| 18 | 200501MCH | 1 | 240X Scrubdeck Casting |
| 19 | 200557MCH | 1 | Drive Pulley |
| 20 | 200558MCH | 1 | Drive Pulley |
| 21 | 430035 | 2 | Drive Hub |

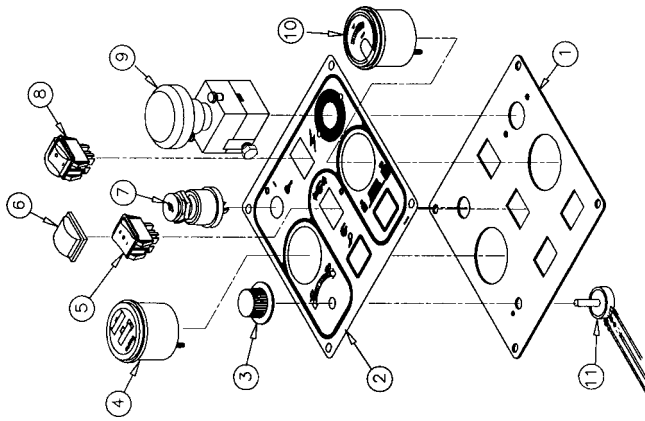
DRIVE MOTOR ASSEMBLY



Parts List

| Item | Part No. | Qty. | Description |
|------|----------|------|------------------------------|
| 1 | 200517 | 1 | Drive Pulley Poly V |
| 2 | 200518 | 1 | 240X Motor Plat Weldment |
| 3 | 200521 | 1 | 240X Motor Spacer |
| 4 | 200528 | 1 | Key 1/4 x 1/4 x 3/4 |
| 5 | 200580 | 1 | Hose Assy, 240X Scrubdeck |
| 6 | 710975 | 1 | SCR-SC 5/16-18 x .87 ST PL |
| 7 | 710986 | 4 | SCR-SC 3/8-16 x .87 ST PL |
| 8 | 711516 | 1 | WSR-Flat .31 x 1.25 x .05 |
| 9 | 711546 | 4 | WSR-Helical 3/8 |
| 10 | 712318 | 2 | WSR-Flat .75 x 1.12 x .12 PL |
| 11 | 712822 | 2 | SCR-MC 10-24 x .50 TH SS |
| 12 | 740209 | 1 | Motor 24V 1HP |
| 13 | 827998 | 2 | Clamp |

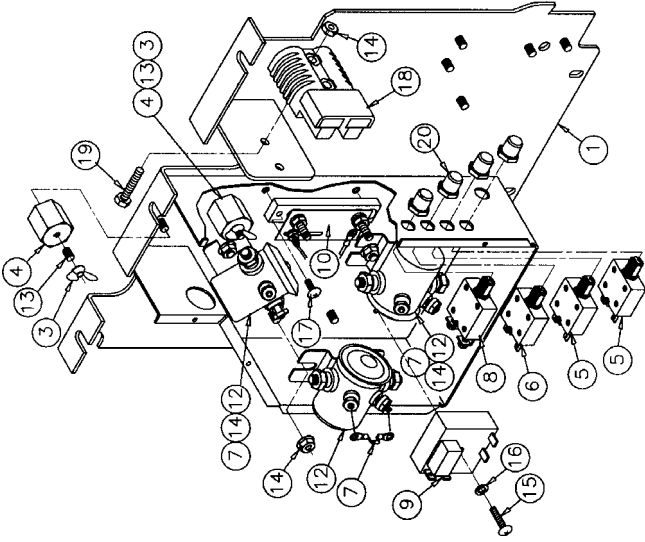
DASHBOARD



Parts List for 200295

| Item | Part No. | Qty. | Description |
|------|----------|------|------------------------------|
| 1 | 200179 | 1 | Dashboard Plate |
| 2 | 715280 | 1 | Decal 200 Dashboard |
| 3 | 809874 | 1 | Knob |
| 4 | 743501 | 1 | Meter, Hour Battery 24V |
| 5 | 742102 | 1 | Switch, 23670C4D |
| 6 | 740811 | 1 | Switch Boot |
| 7 | 741005 | 1 | Keyswitch On-Off |
| 8 | 740711CE | 1 | Switch Dreefs w/Splashguards |
| 9 | 742202 | 1 | Disconnect Switch 125A |
| 10 | 743049 | 1 | Gauge, Brush Pressure |
| 11 | 743199-1 | 1 | Potentiometer Assy |

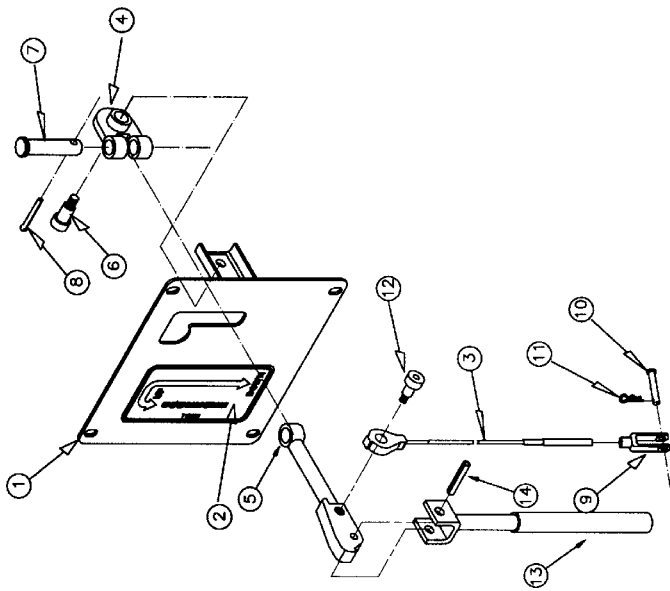
BACK PANEL



Parts List for 200175-1

| Item | Part No. | Qty. | Description |
|------|----------|------|-----------------------------|
| 1 | 200124 | 1 | Backpanel Weldment |
| 2 | 711368 | 2 | Wing Nut, 1/4-20 |
| 3 | 740132 | 2 | Insulator (Glastic) |
| 4 | 740238 | 2 | Circuit Breaker 18 |
| 5 | 740247 | 1 | Circuit Breaker 30 |
| 6 | 742000 | 3 | Diode Assembly |
| 7 | 740549 | 1 | Circuit Breaker 50 |
| 8 | 741037 | 1 | 5 Sec. True Off Delay Timer |
| 9 | 740134-1 | 1 | Shunt, Uncalibrated |
| 10 | 743250 | 1 | Wire Harness, Lower Assy. |
| 11 | 788147 | 3 | Solenoid 24VDC |
| 12 | 833638 | 2 | Brass Stud |
| 13 | 711425 | 8 | Whiz-Nut 1/4-20 |
| 14 | 712823 | 1 | SCR-THMS 10-24 x 1" |
| 15 | 712920 | 1 | WSR-Nylon .22 x .42 x .04 |
| 16 | 712536 | 2 | SCR 10-24 x .62 |
| 17 | 740159 | 1 | CB175 Red Housing Only |
| 18 | 711210 | 2 | SCR-HH 1/4-20 x 1 1/4 |
| 19 | 742748 | 4 | Boot, Circuit Breaker |

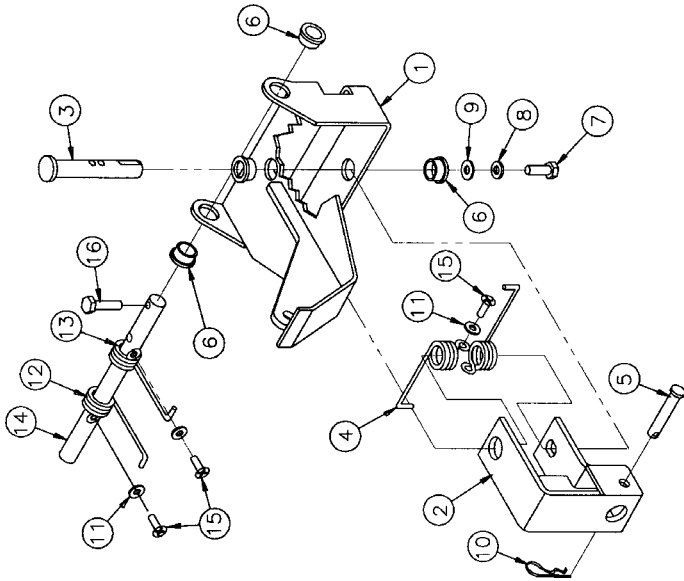
SQUEEGEE LIFT



Parts List for 200240

| Item | Part No. | Qty. | Description |
|------|----------|------|----------------------------|
| 1 | 200239 | 1 | Panel Cover Weldment |
| 2 | 715603 | 1 | Decal Squegee Lift |
| 3 | 200241 | 1 | Squegee Lift Cable |
| 4 | 200261 | 1 | Inner Arm Weldment |
| 5 | 200017 | 1 | Arm Squegee, Lift Weldment |
| 6 | 712081 | 1 | Bolt, Shoulder 5/16 x .75 |
| 7 | 831965 | 1 | Clevis Pin 3/8 |
| 8 | 809311 | 1 | Cotter Pin 7/64 x 1" |
| 9 | 881009 | 1 | Yoke |
| 10 | 881002 | 1 | Clevis Pin 5/16 |
| 11 | 711808 | 1 | Cotter Pin #13 |
| 12 | 712041 | 1 | Bolt-Shoulder 5/16 x .44 |
| 13 | 200038 | 1 | Handle Weldment |
| 14 | 711642 | 1 | 3/16 X 1.00 Roll Pin |

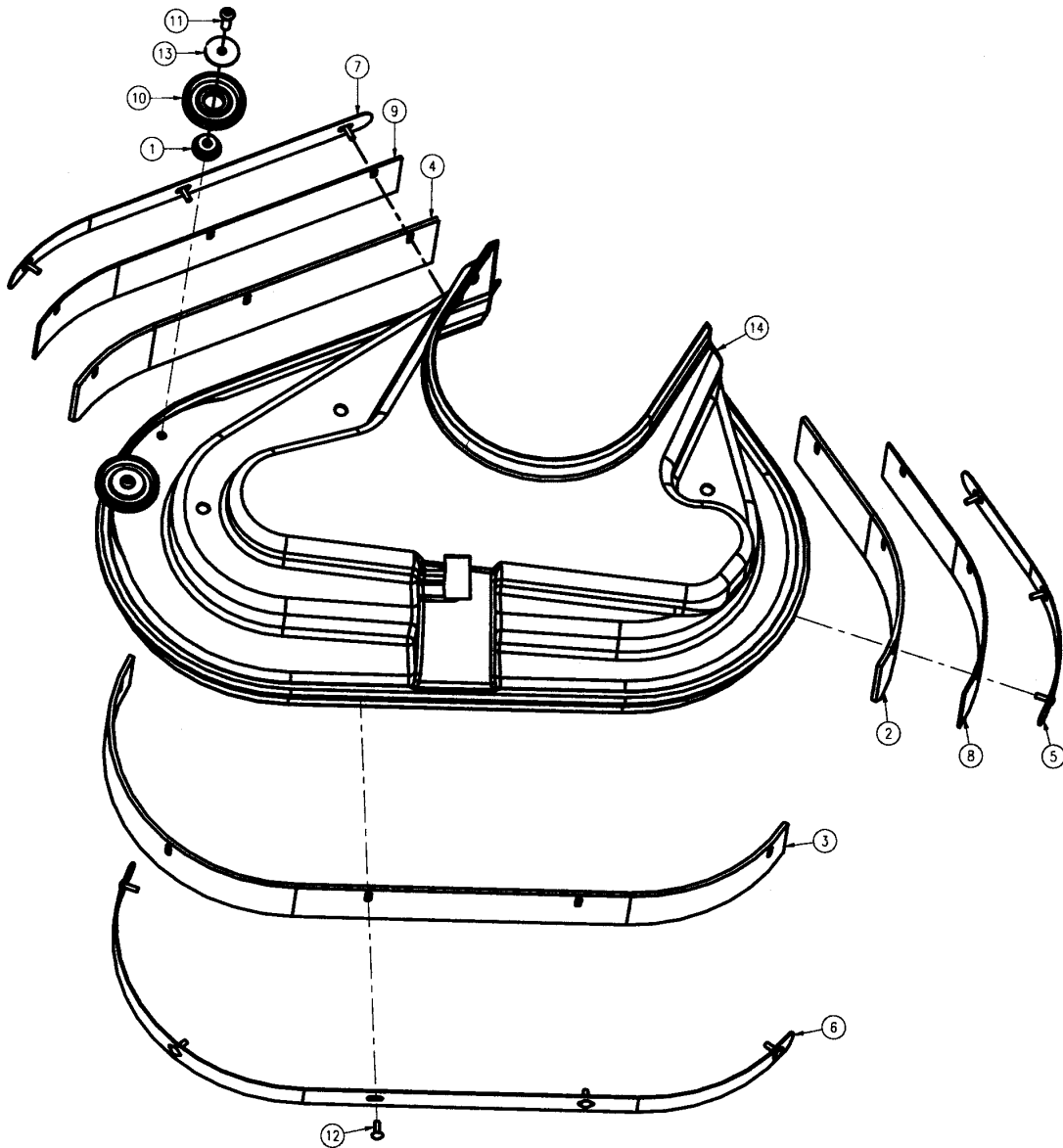
SQUEEGEE MECHANISM



Parts List for 200153

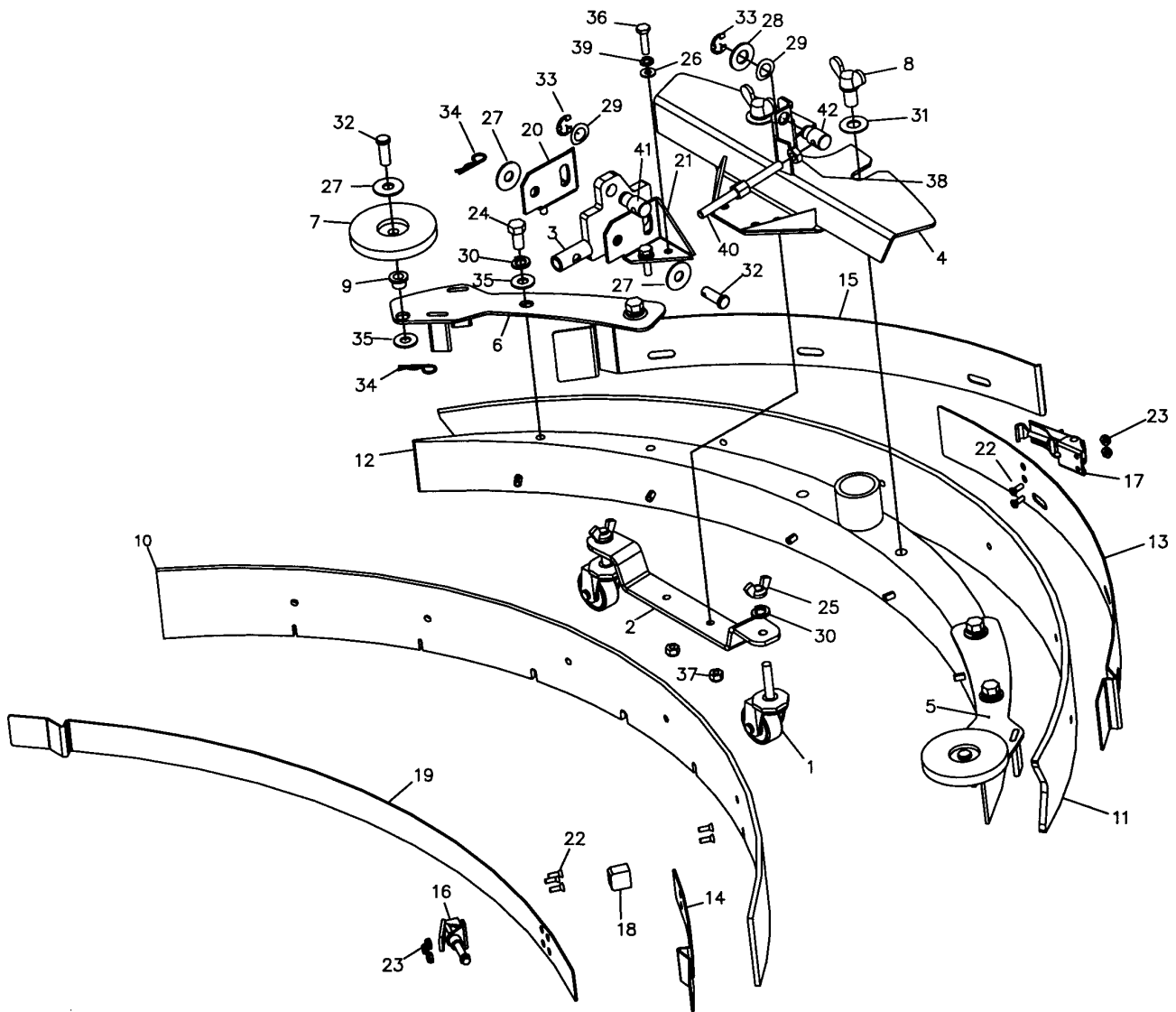
| Item | Part No. | Qty. | Description |
|------|----------|------|-----------------------------|
| 1 | 200144 | 1 | Spring Housing Weldment |
| 2 | 200300 | 1 | Yoke Weldment |
| 3 | 210375 | 1 | Swivel Pin |
| 4 | 210391 | 2 | Return Spring SS |
| 5 | 210415 | 1 | Clevis Pin .31 x 1.7 11-097 |
| 6 | 260041 | 4 | Oilite Flange Bushing |
| 7 | 710180 | 1 | SCR-MC 1/4-20 x .75 ST PL |
| 8 | 711544 | 1 | WSR-Helical 1/4 |
| 9 | 711519 | 1 | WSR-Flat .25 x 1.01 x .06 |
| 10 | 711808 | 1 | Cotter Pin - Hair #13 |
| 11 | 712320 | 4 | WSR-Nylon .22 x .45 x .04 |
| 12 | 900080 | 1 | Spring, Torsion RH |
| 13 | 900081 | 1 | Spring, Torsion LH |
| 14 | 200159 | 1 | Pin |
| 15 | 712536 | 4 | SCR-MC 10-24 x .62 SS |
| 16 | 712564 | 1 | BLT-HH 1/4-20 x 1.00 SS |

COVER ASSEMBLY 200570



Parts List

| Item | Part No. | Qty. | Description |
|------|----------|------|-----------------------------|
| 1 | 200535 | 2 | Roller Spacer |
| 2 | 200551 | 1 | Skirt, Left 240X |
| 3 | 200552 | 1 | Skirt, Center 240X |
| 4 | 200553 | 1 | Skirt, Right 240X |
| 5 | 200554 | 1 | Skirt Retainer, Left 240X |
| 6 | 200555 | 1 | Skirt Retainer, Center 240X |
| 7 | 200556 | 1 | Skirt Retainer, Right 240X |
| 8 | 200571 | 1 | Left Backer Plate, 240X |
| 9 | 200573 | 1 | Right Backer Plate, 240X |
| 10 | 430085 | 2 | Squeegee Bumper Wheel |
| 11 | 710975 | 2 | SCR-SC 5/16-18 x .87 ST PL |
| 12 | 711160 | 11 | #10 x 5/8 Hi-Lo |
| 13 | 712759 | 2 | WSR-Flt .31 x 1.37 x .06 SS |
| 14 | 200522 | 1 | 240X Scrubdeck Cover |



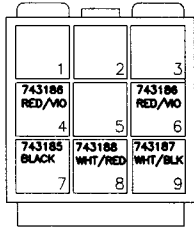
Parts List for 200348

| Item | Part No. | Qty. | Description | Item | Part No. | Qty. | Description |
|------|----------|------|-------------------------------|------|-----------|------|------------------------------------|
| 1 | 200064 | 2 | Caster Wheel 3/8"-16 x 1-5/8" | 22 | 710530 | 7 | SCR-MC 8-32 x .50 BR |
| 2 | 200065 | 1 | Castor Support Bracket | 23 | 711026 | 5 | Nut, Hex 8-32 Nyloc SS |
| 3 | 200169 | 1 | 200X Sq Lift Weldmt New | 24 | 711241 | 4 | SCR-Hex 3/8-16 x .75" ZP |
| 4 | 200342 | 1 | Squeegee Brkt Weldmt, 200X | 25 | 711367 | 2 | Nut-Wing 3/8-16 ST PL |
| 5 | 200344 | 1 | Top Plate Weldmt, 200X LH | 26 | 711504 | 4 | WSR-Flat 1/4 ID SS |
| 6 | 200347 | 1 | Top Plate Weldmt, 200X RH | 27 | 711507 | 4 | WSR-Flat .37 x 1.12 x .06 |
| 7 | 210153 | 2 | Roller Wheel | 28 | 711509 | 1 | WSR-Flat 1/2 (.54 x 1.08 x .087) |
| 8 | 220249 | 2 | Wing Bolt 1/2-13 x .75" | 29 | 711524 | 2 | WSR-Wave .52 x .87 x .01 |
| 9 | 260066 | 2 | Oilite Bushing | 30 | 711546 | 6 | WSR-Helical 3/8 |
| 10 | 260242 | 1 | Front Squeegee Blade 260 | 31 | 711592 | 2 | WSR-Nylon .50 x 1.06 x .06 |
| 11 | 260243 | 1 | Rear Squeegee Blade 260 | 32 | 711668 | 3 | Cleavis Pin, 3/8 x 1 11-141 |
| 12 | 260248 | 1 | 260 Sq. Casting w/Roll Pin | 33 | 711713 | 2 | Retaining Ring - "E" Type Ext .500 |
| 13 | 260339 | 1 | Strap - Rear Latch 260 | 34 | 711808 | 3 | Cotter Pin - Hair #13 |
| 14 | 260344 | 1 | Strap - Front Stop 260 | 35 | 712301 | 6 | WSR-Flat .87 x .37 x .06 |
| 15 | 260346 | 1 | Strap - Rear Catch 260 | 36 | 712564 | 4 | Bolt-HH 1/4-20 x 1.00 SS |
| 16 | 281074 | 1 | Squeegee Toggle Clamp, 2800 | 37 | 712667 | 2 | Nut, Hex 1/4-20 Nyloc SS |
| 17 | 281075 | 1 | Squeegee Latch, 2800 | 38 | 712680 | 1 | Nut-Hex 5/16-18 SS |
| 18 | 281740 | 1 | Stop Bar | 39 | 712758 | 4 | WSR-Helical 1/4 SS |
| 19 | 320308 | 1 | Strap-Front Clamp 320 | 40 | 750689 | 1 | Adjustment Stud |
| 20 | 383424 | 1 | Mounting Bracket-Right | 41 | 762022PLT | 1 | Nut, Adjusting (LH) |
| 21 | 383425 | 1 | Mounting Bracket-Left | 42 | 762257PLT | 1 | Nut, Adjusting (RH) |

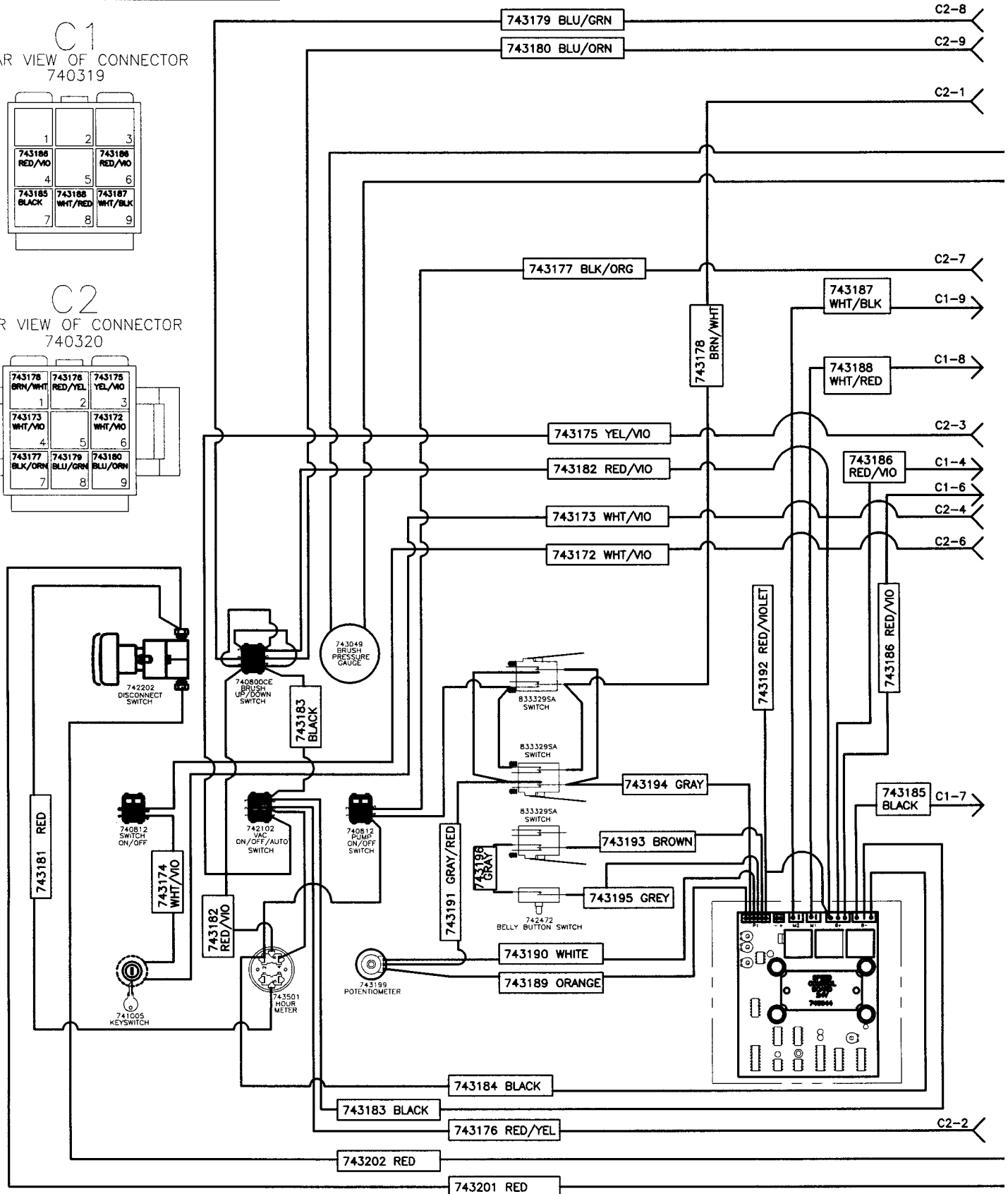
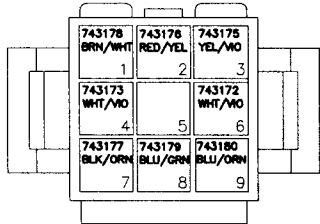
MC240024QP, CE

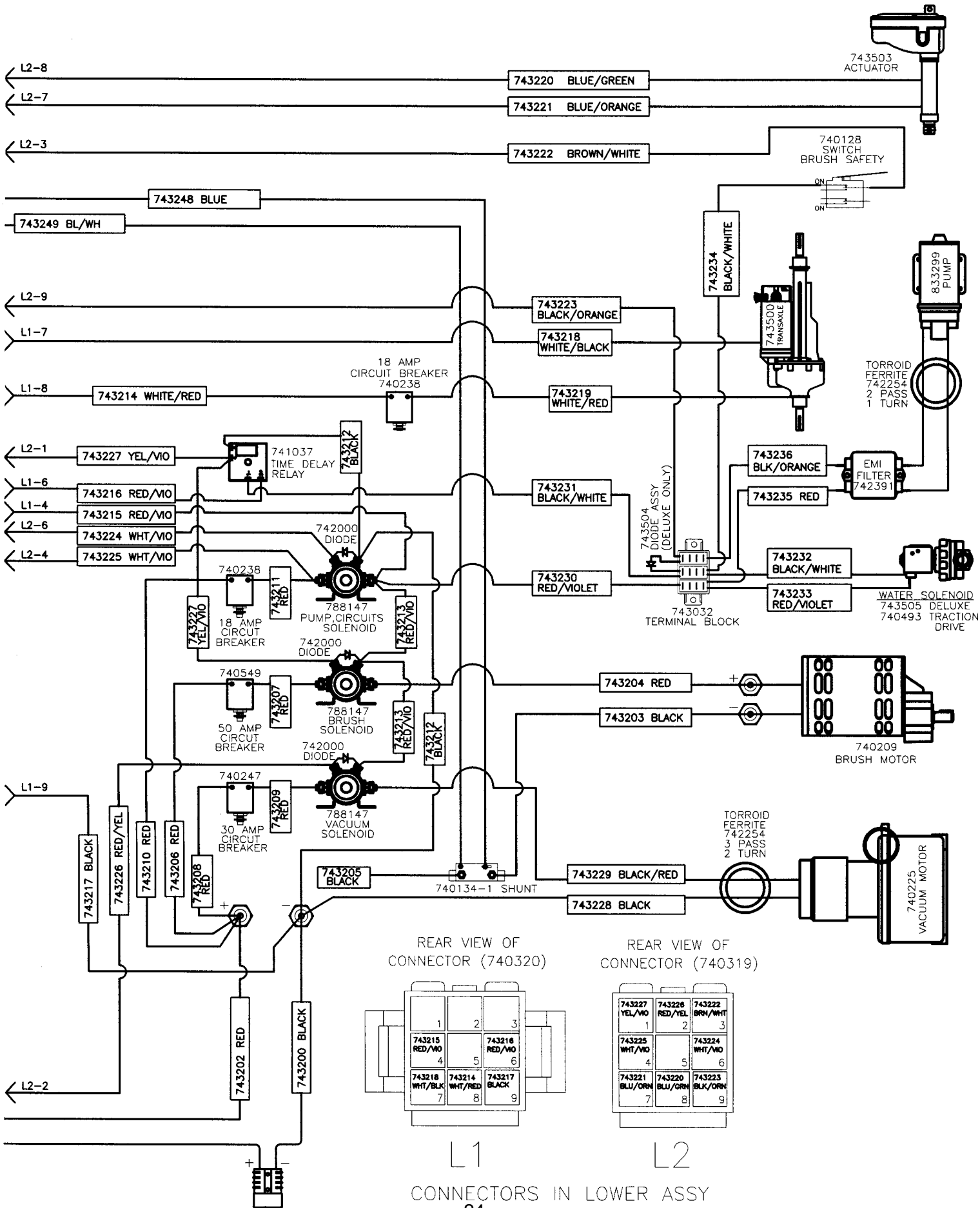
CONNECTORS IN CONSOLE ASSY

C1
REAR VIEW OF CONNECTOR
740319

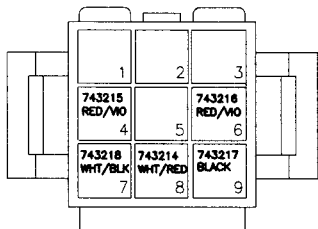


C2
REAR VIEW OF CONNECTOR
740320



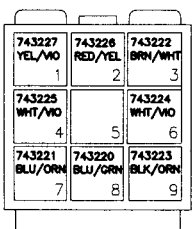


REAR VIEW OF CONNECTOR (740320)



L1

REAR VIEW OF CONNECTOR (740319)



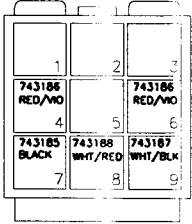
L2

CONNECTORS IN LOWER ASSY

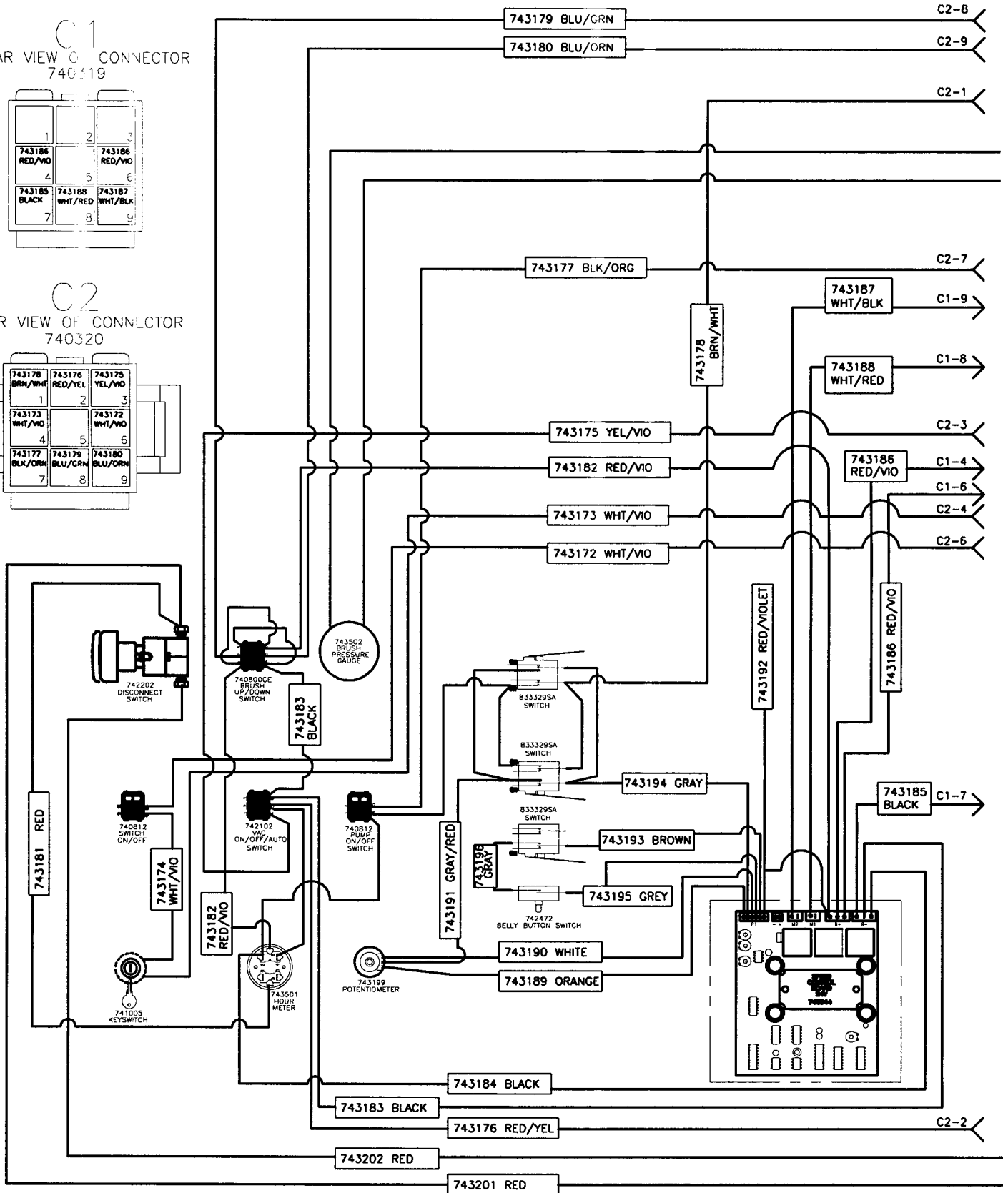
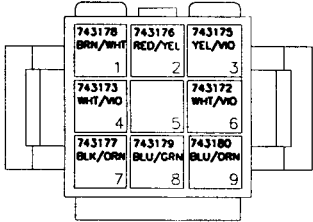
240X WIRING DIAGRAM - MC240024CE

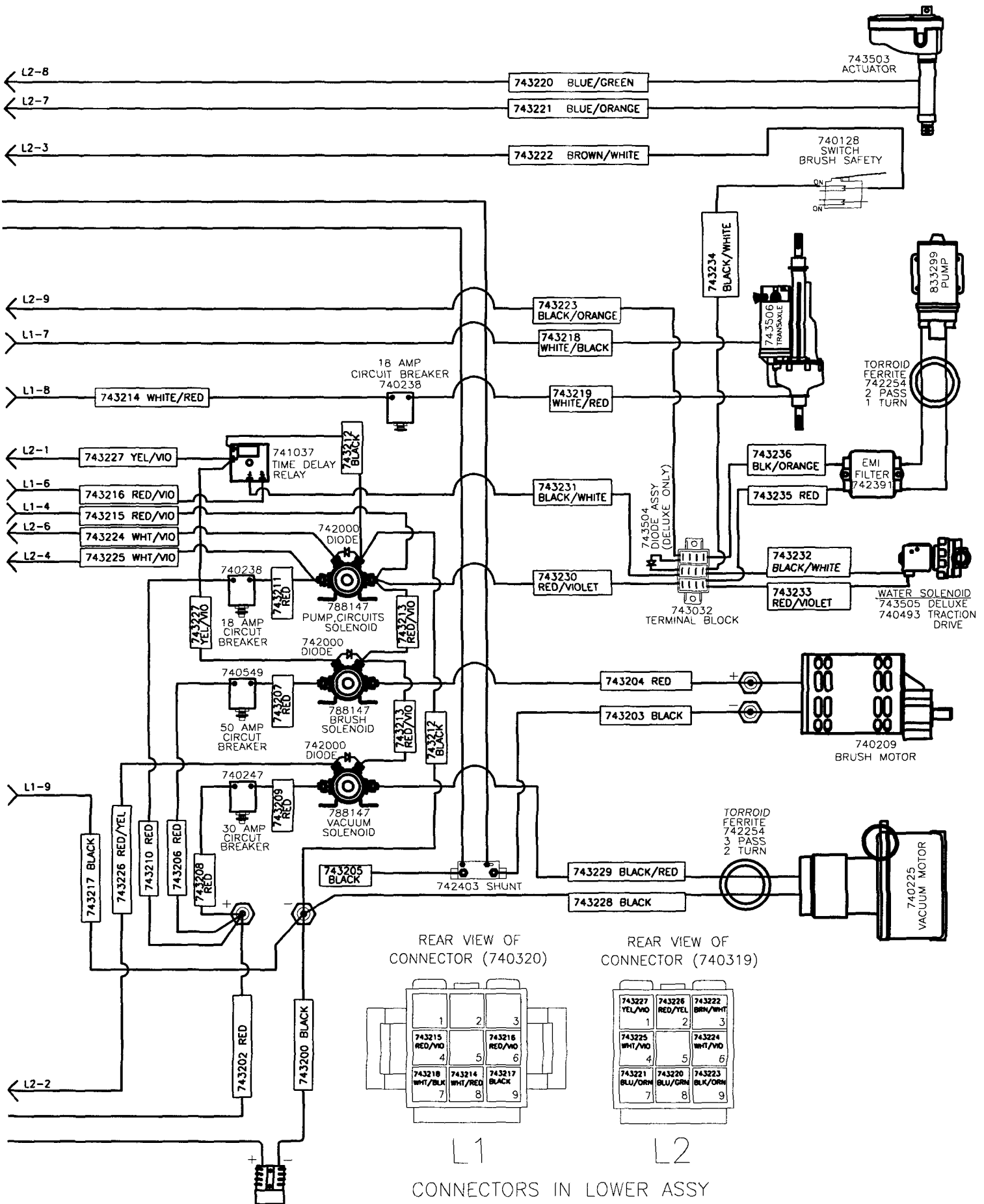
CONNECTORS IN CONSOLE ASSY

C1
REAR VIEW OF CONNECTOR
740319



C2
REAR VIEW OF CONNECTOR
740320





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