

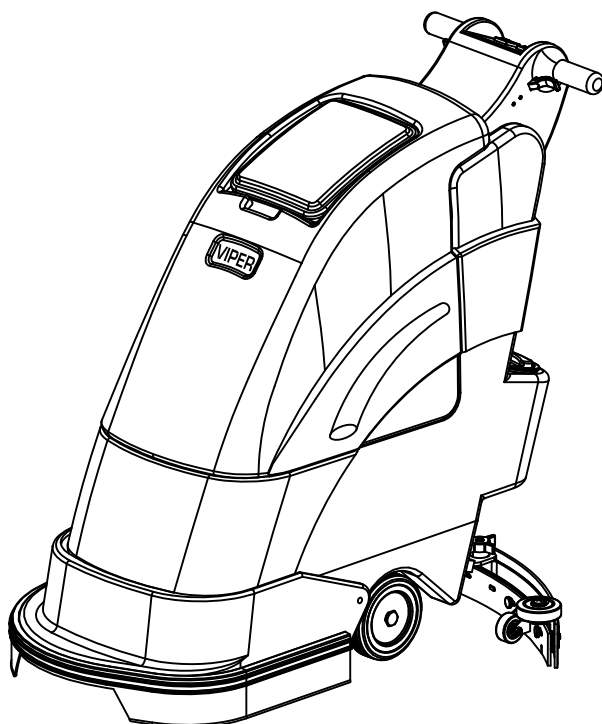


SEMI-AUTO SCRUBBERS

OWNERS MANUAL

IMPORTANT: READ OWNERS MANUAL CAREFULLY

Please fill out & return your warranty card!



MODEL# FANG 18C

SERIAL# _____

Nilfisk Inc.
9435 Winnetka Avenue North
Minneapolis, MN 55445
www.usviper.com

**VIPER ...exceptional
value**

**REV.03(2015-12)
VF80189**



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SAFETY PRECAUTIONS

This machine is intended for commercial use. It is constructed for use in an indoor environment and is not intended for any other use. Use only with recommended accessories.

All operators shall read, understand and exercise the following safety precautions:

1) DO NOT OPERATE MACHINE:

- Unless trained and authorized.
- Unless you have read and understand the operators manual.
- In flammable or explosive areas.
- If not in proper operating condition.
- In outdoor areas.

2) BEFORE OPERATING MACHINE:

- Make sure all safety devices are in place and operate properly.

3) WHEN USING MACHINE:

- Follow all safety guidelines.
- Report and fix any damage to machine prior to operating it.

4) BEFORE LEAVING OR SERVICING MACHINE:

- Stop machine on level ground.
- Turn machine off. Unplug cord from outlet.

5) WHEN SERVICING MACHINE:

- Read operators manual thoroughly prior to operating or servicing this machine.
- Turn machine off. Unplug cord from outlet.
- Use manufacturer supplied or approved replacement parts.

WARNING

: Flammable materials can cause an explosion or fire. Do not use flammable materials in tanks.

WARNING

: Flammable materials or reactive metals can cause explosion or fire. Do not pick up.

MACHINE SET UP & INSTALLATION

UNPACK MACHINE

Be sure and check packing carton for any damage. Immediately report any damage to carrier. Be careful not to let machine vibrate while carrying. Check contents of package to ensure that the following items are included: Machine, squeegee assembly, pad driver.

MACHINE SET UP

PRE-OPERATION CHECKS

1. Sweep the outside of the machine.
2. Make sure the voltage of machine conform to local voltage.
3. Check that squeegee is properly installed.
4. Check that brush / pad is properly installed.
5. Bumper doesn't touch the floor directly. The gap between the bumper and the floor surface can be adjusted by adjusting sliding plate.
6. The forward speed of machine can be controlled by turning the butterfly nut. Turn the nut clockwise to speed up machine. or turn the nut anticlockwise to slow down machine.
7. Make sure the working surface can support the machine weight, the gradient of the floor can't exceed the limit that machine allow.

INSTALLING PAD DRIVER OR BRUSH

1. Unplug machine.
2. Tilt the machine backwards, line up the drive pulley hub with the hole of brush or pad driver, make sure the three blocks are fitted into the three slots of drive pulley.
3. If a pad driver is being used, the appropriate pad should be attached to the pad driver first.
4. Plug power cord into a grounded outlet, switch on the brush motor and then pull the operating triggers gently to mount the pad driver or brush automatically.

INSTALLING THE SQUEEGEE

1. Loosen the two knobs on the squeegee and slide the squeegee into the slots at the rear of

the squeegee bracket. (the wheels on the squeegee point to the back)

2. Tighten the knobs securely.

FILLING THE SOLUTION TANK

1. The fill port is located at the rear of machine.
2. Fill solution tank with water. (water temperature should not exceed 104° F) The clear tube in the back right of the machine has gallon markers to help determine the water level in the solution tank

WARNING

: Do not put any flammable materials into solution tank. This can cause an explosion or a fire. Only use recommended cleaning chemicals. Contact your janitorial supply distributor for recommendations on proper chemicals.

MACHINE OPERATION

WARNING

: Do not operate machine unless you have read and understand this manual.

1. Adjust control housing to a comfortable operating height by squeezing together the two thumb levers directly underneath the housing.
2. Lower squeegee assembly to the floor.
3. Turn brush motor switch to "on" position.
4. Turn vacuum motor switch to "on" position.
5. Rotate the ball valve of solution tank to horizontal position. Solution will not begin to flow until the operating triggers are pulled.
6. To begin scrubbing, pull on one or both of the red operating triggers, when these triggers are pulled, the pad driver will begin to spin and the solution will begin to flow.
7. Begin scrubbing by moving the machine forward.

HINT

: Do not keep the machine in the same position with the pad / brush spinning, or you could cause damage to the floor.

8. Adjust solution flow by adjusting the position of ball valve knob.

WHILE OPERATING MACHINE

1. Occasionally look through the clear recovery tank lid to see if there is any foam build-up. If excessive foam is found, add defoamer to the recovery tank.

WARNING : Foam must not enter the float shut-off screen, or damage can occur to the vacuum motor. Foam will not activate the machines float shut-off device.

2. Occasionally view the clear tube at the back right of the machine to check the amount of cleaning solution that is right of the machine.

If the squeegee assembly leaves streaks on the floor, raise the squeegee off the floor and wipe the blades down with a damp cloth.

WARNING : Do not use your fingers to wipe or remove debris from the blades, as injury may occur.

When the solution tank runs empty, turn off the brush switch and ball valve of solution tank. Keep the squeegee down and continue to vacuum until all the dirty water is picked up.

TANK DRAINING

1. Turn the switches on the control panel to "off" position.
2. Raise the squeegee, transport machine to approved area for draining tank(s).

DRAINING THE RECOVERY (DIRTY) TANK

HINT : Any time scrubbing is completed, or when refilling solution tank, the recovery tank should be drained and cleaned.

WARNING : If the recovery tank is not drained when the solution tank has been refilled, foam or water may enter the float shut-off mechanism and cause damage to the vacuum motor.

1. Remove the drain hose from the holder, and place the drain hose over the floor drain. Twist off the drain hose plug to begin the draining process.
2. Clean the recovery tank after every use. Use a fresh water hose to rinse out the recovery tank. Be careful not to spray water into the float shut-off mechanism.

HINT : If you are storing the machine for any period of time, always leave the clear recovery tank lid off the tank so the tank can dry completely and smell fresh.

DRAINING THE SOLUTION (CLEAN) TANK

HINT : Any time scrubbing operation is completed, the solution tank should be drained and cleaned.

1. Pull down on the clear tube (back right of the machine) to remove it from the hose barb. This will allow the solution to flow freely into a bucket or floor drain.
2. Rinse the solution tank with clean water after every use. This will help prevent chemical buildup and clogging of the solution lines.
3. Once tank is rinsed, flushed and drained, reconnect the clear tube to the hose barb. Be sure the tube is pushed all the way up on the hose barb.

PREVENTATIVE MAINTENANCE

WARNING : Before performing any maintenance on the machine, be sure that the power is turned off.

WARNING : Repairs are to be completed by Authorized Service Centers only. Any repairs completed by unauthorized persons will void the warranty.

1. Remove pad driver / brush and clean with approved cleaner.
2. Drain recovery and solution tanks completely and rinse out with clean water. Visually check the recovery tank for debris and clean out as necessary.
3. Raise squeegee assembly off floor and wipe

- it down with a damp towel. Be sure to store the squeegee in the up position.
4. Remove the float shut-off assembly and rinse it out with clean water.
 5. Clean machine with an approved cleaner and a damp towel. Don't spray water to clean the outside of machine to avoid damage to motor and wiring.
 6. Unplug vacuum motor from power source and hose cuff & remove the drain hose from the holder prior to removing the recovery tank when performing maintenance.

VACUUM MOTOR MAINTENANCE

1. Contact your local Viper Distributor for any motor maintenance.
2. Check the vacuum motor brushes every 250 hours, Replace the brushes when they are worn to a length of 10mm or less.

MACHINE STORAGE

1. Always store the machine indoors.
2. Always store the machine in a dry area.
3. Always take off the pad driver / brush
4. Always store the machine with the squeegee assembly raised off the floor.
5. If storing in an area which may reach freezing temperatures, be sure to drain all fluids from the machine prior to storage. Any damage caused by freezing temperatures will not be covered by the warranty.
6. Drain the recovery tank and remove the clear on the top of the recovery tank so that it can "breathe" during storage.
7. Drain the solution tank of all fluid.

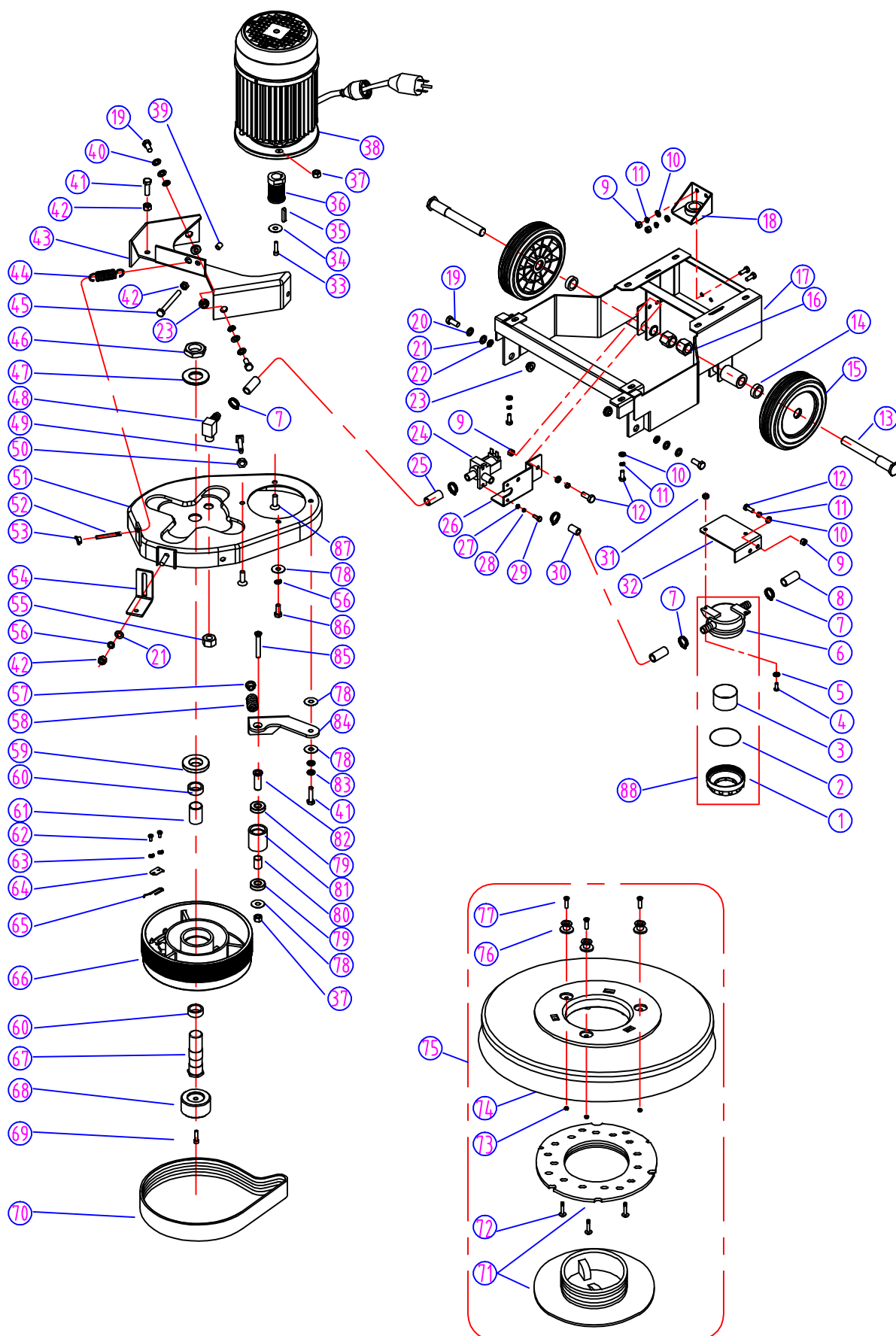
BASIC TROUBLESHOOTING

| PROBLEM | CAUSE | SOLUTION |
|----------------------------|--|--|
| No Power | The wiring not connected correctly or bad wiring | Check the wiring or contact Viper Distributor |
| | Bad brush motor | Contact Viper Distributor |
| | Carbon brushes worn out | Contact Viper Distributor |
| Vacuum motor does not run | The wiring not connected correctly or bad wiring | Check the wiring or contact Viper Distributor |
| | Bad vacuum motor | Contact Viper Distributor |
| | Carbon brushes worn out | Contact Viper Distributor |
| Little or no solution flow | Bad ball valve | Contact Viper Distributor |
| | Bad solution valve | Contact Viper Distributor |
| | Ball valve position in need of adjustment | When ball valve is in horizontal position. The amount of solution flow is maximum. |
| Poor water pick up | Squeegee clogged | Clean debris off squeegee with damp towel |
| | Squeegee blades worn | Install new squeegee blades |
| | Squeegee not mounted correctly | Confirm that the squeegee assembly is securely fastened to the machine and not loose fitting |
| | Vacuum hoses have a hole or are loose | Check hose connections and make sure they are firm. Replace hose if damaged. |
| | Vacuum hose may be clogged | Check hose for debris and remove any clog. |
| | Drain hose stopper is loose | Tighten drain plug. |
| | Vacuum motor is loose | Tighten vac motor mounting screws. Do not over tighten or damage will occur. |
| | Recovery tank lid is loose | Confirm the clear recovery tank lid is securely in place. |
| | Recovery tank is full | Drain recovery tank |
| | Float shut off is clogged | Remove float shut off from inside recovery tank and remove any debris |

Technical Specifications:

| | |
|------------------------|-----------------------|
| Working Width | 450mm |
| Squeegee Width | 750mm |
| Efficiency | 1100m ² /h |
| Brush Dia. | 450mm |
| Brush Speed | 255rpm |
| Max Pad Pressure | 30Kg |
| Brush Motor | 110-115V, 750W |
| Vacuum Motor | 110-115V,650W |
| Solution Tank Capacity | 30L |
| Recovery Tank Capacity | 41L |
| Machine Weight | 68Kg |
| Machine Length | 1100mm |
| Machine Height | 970mm |
| Machine Width | 545mm |
| Cable Length | 25M |
| Max Gradient | 2% |
| Type of Drive | Semi-Automatization |
| Noise Level | 70dB |
| Working Vacuum | 155mbar |

PARTS LIST

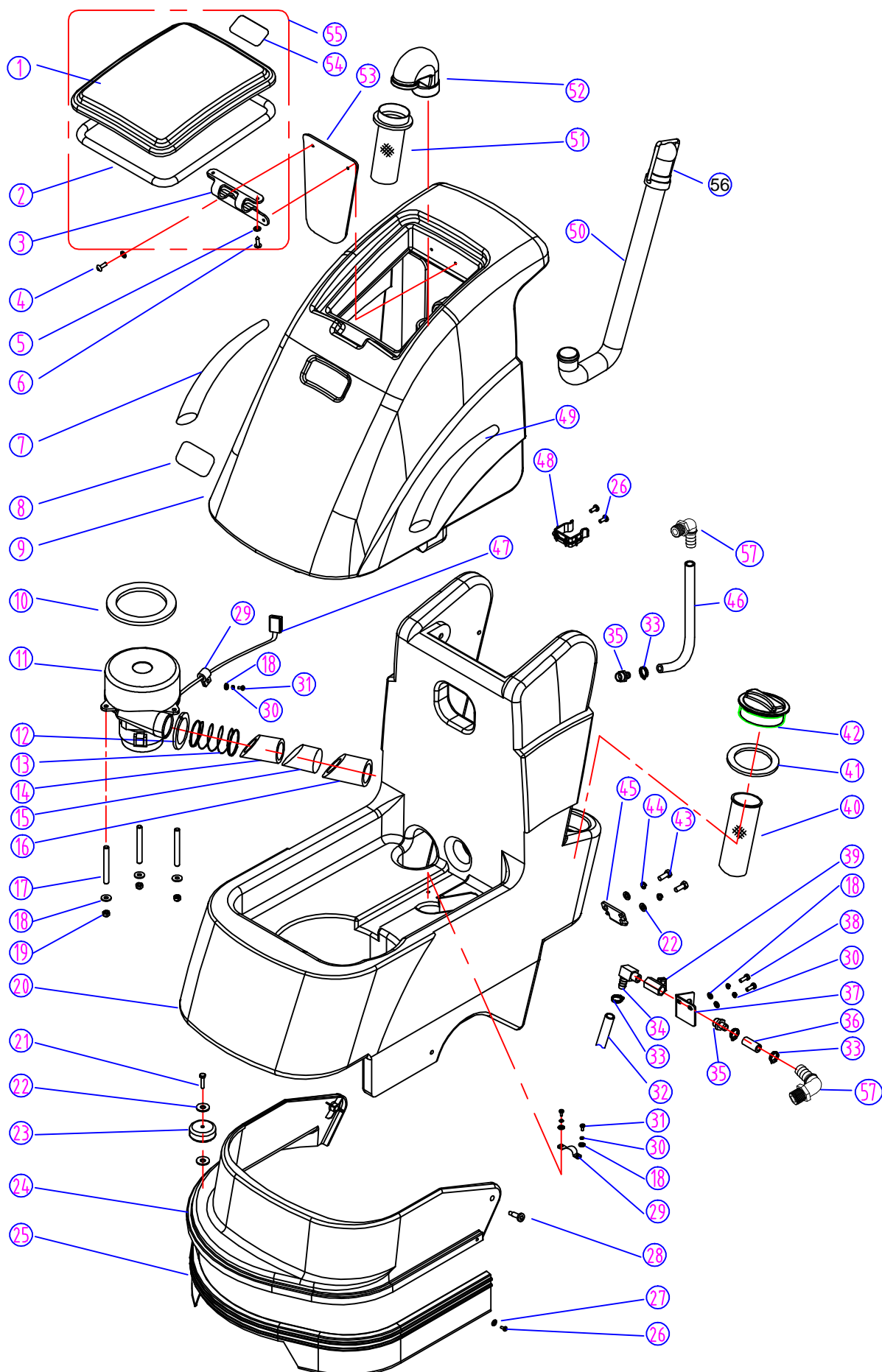


| DIA NO. | PART NUMBER | DESCRIPTION | NO. REQ'D |
|---------|-------------|----------------------------|-----------|
| 1 | VF80111 | FILTER, CLEAR DOME | 1 |
| 2 | VF82139 | "O" RING | 1 |
| 3 | VF80113 | FILTER | 1 |
| 4 | VV20501 | SCREW, PH, SST, M5 X 14 | 2 |
| 5 | VV13654 | WASHER, SST, M5 | 2 |
| 6 | VF80112 | MOUNTING BASE, FILTER | 1 |
| 7# | VV10114 | CLAMP, HOSE | 5 |
| 8 | VF80349 | HOSE, INLET, FILTER | 1 |
| 9 | VF13521 | NUT, M6 | 12 |
| 10 | VF13533 | WASHER, M6 | 12 |
| 11 | VV13607 | WASHER, LOCK, M6 | 12 |
| 12 | VF13495 | SCREW, M6 X 16 | 12 |
| 13 | VF80123B | AXLE, WHEEL | 2 |
| 14 | VF82113 | BUSHING | 2 |
| 15 | VF80115B | WHEEL, 6" | 2 |
| 16 | VF14257 | NUT, NYLON INSERT, M16 | 2 |
| 17 | VF80110 | CHASSIS | 1 |
| 18 | VF80109 | CONNECTOR | 1 |
| 19 | VV13604 | SCREW, HEX, M8 X 20 | 4 |
| 20 | VF14313 | WASHER, INTERNAL TOOTH, M8 | 2 |
| 21 | VF13514A | WASHER, PLAIN, M8 | 5 |
| 22 | VF80130 | WASHER, M8 | 4 |
| 23 | VF80132 | BUSHING | 4 |
| 24 | VF80216U | SOLUTION VALVE, 110V | 1 |
| 25 | VF80238 | HOSE, OUTLET, VALVE | 1 |
| 26 | VF80119A | MOUNTING FRAME, VALVE | 1 |
| 27 | VA13483 | WASHER, PLAIN, M4 | 2 |
| 28 | VV20291 | WASHER, LOCK, M4 | 2 |
| 29 | VA13473 | SCREW, PH, M4 X 16 | 2 |
| 30 | VF80114 | OUTLET FILTER | 1 |
| 31 | GT13022 | NUT, NYLON INSERT, M5 | 2 |
| 32 | VF80120 | MOUNTING PLATE, FILTER | 1 |
| 33 # | VF13498 | SCREW, HEX SOCKET, M6 X 20 | 1 |
| 34 | VF80207 | WASHER, PLAIN BRASS | 1 |
| 35 | VF80240 | KEY | 1 |
| 36 | VF80220 | DRIVING PULLEY | 1 |
| 37 | VF13503 | NUT, NYLON INSERT, M8 | 5 |
| 38 | YCQ35000A | MOTOR, 110V | 1 |
| 39 | VF80241 | GASKET | 1 |
| 40 | VF14314 | WASHER, EXTERNAL TOOTH, M8 | 2 |
| 41 | GT13018 | BOLT, M8 X 30 | 2 |
| 42 | VF13513 | NUT, M8 | 3 |
| 43 | VF80206 | SUPPORTING SHELF | 1 |
| 44 | VF80237 | SPRING | 1 |
| 45 | VF14114 | BOLT, M8 X 55 | 1 |

| DIA NO. | PART NUMBER | DESCRIPTION | NO. REQ'D |
|---------|-------------|-----------------------------|-----------|
| 46# | VF80222 | THIN NUT | 2 |
| 47 | VF14315 | WASHER, PLAIN, M24 | 1 |
| 48 | VF81403 | BARB, HOSE, 90° DEG | 1 |
| 49 | VF14255 | SET SCREW, M12 X 65 | 1 |
| 50 | VF14057A | NUT, M12 | 1 |
| 51 | VF80201 | FRAME | 1 |
| 52 | VF80225 | BOLT | 1 |
| 53 | VF14101 | NUT, BUTTERFLY, M6 | 1 |
| 54 | VF80203 | SLIDING PLATE | 1 |
| 55 | VF80213 | NUT, BRASS | 1 |
| 56 | VF13519 | WASHER, LOCK, M8 | 2 |
| 57 | VF80235 | SPACER | 1 |
| 58 | VF80232 | SPRING | 1 |
| 59 | VF80223 | SPACER | 1 |
| 60 | VF999827 | BEARING, 6205 | 1 |
| 61 | VF80221 | SPACER, LARGE | 1 |
| 62 | VV20509 | SCREW, PH, M5 X 10 | 2 |
| 63 | VV13601 | WASHER, LOCK, M5 | 2 |
| 64 | VF83131 | CLAMP | 1 |
| 65 | VF80262 | SPRING WIRE | 1 |
| 66# | VF80205A | DRIVEN PULLEY | 1 |
| 67 | VF80219 | SHAFT, DRIVEN PULLEY | 1 |
| 68 | VF80233 | GASKET | 1 |
| 69 | GT13015 | SCREW, HEX SOCKET, M6 X 30 | 1 |
| 70 | VF80242 | BELT | 1 |
| 71 | VF99003A | BIG MOUTH | 1 |
| 72 | VF14400 | SCREW, ST, M4.2 X 13 | 3 |
| 73 | VF13502 | NUT, NYLON INSERT, M6 | 3 |
| 74# | VF80212B | PAD HOLDER | 1 |
| 75# | VF80212B | PAD HOLDER ASSY | 1 |
| 76# | VF83133 | BLOCK | 3 |
| 77 | VF14225A | SCREW, FH, M6 X 40 | 3 |
| 78 | VF13535 | WASHER, PLAIN, M8 X M20 X 2 | 4 |
| 79# | VF999821A | BEARING, 6002LU | 2 |
| 80 | VF80209 | SPACER, SMALL | 1 |
| 81 | VF80215 | TENSION WHEEL | 1 |
| 82 | VF80214 | BUSHING BEARING | 1 |
| 83 | VF14312 | WASHER, WAVE, M8 | 2 |
| 84 | VF80208 | ROD, TENSION WHEEL | 1 |
| 85 | GT13066 | SCREW, HEX SOCKET, M8 X 55 | 1 |
| 86 | VV13657 | BOLT, M8 X 25 | 1 |
| 87 | GT13067 | SCREW, HEX SOCKET, M8 X 25 | 2 |
| 88 | VF80111A | KIT, FILTER | 1 |

= Revised or new since last update

PARTS LIST

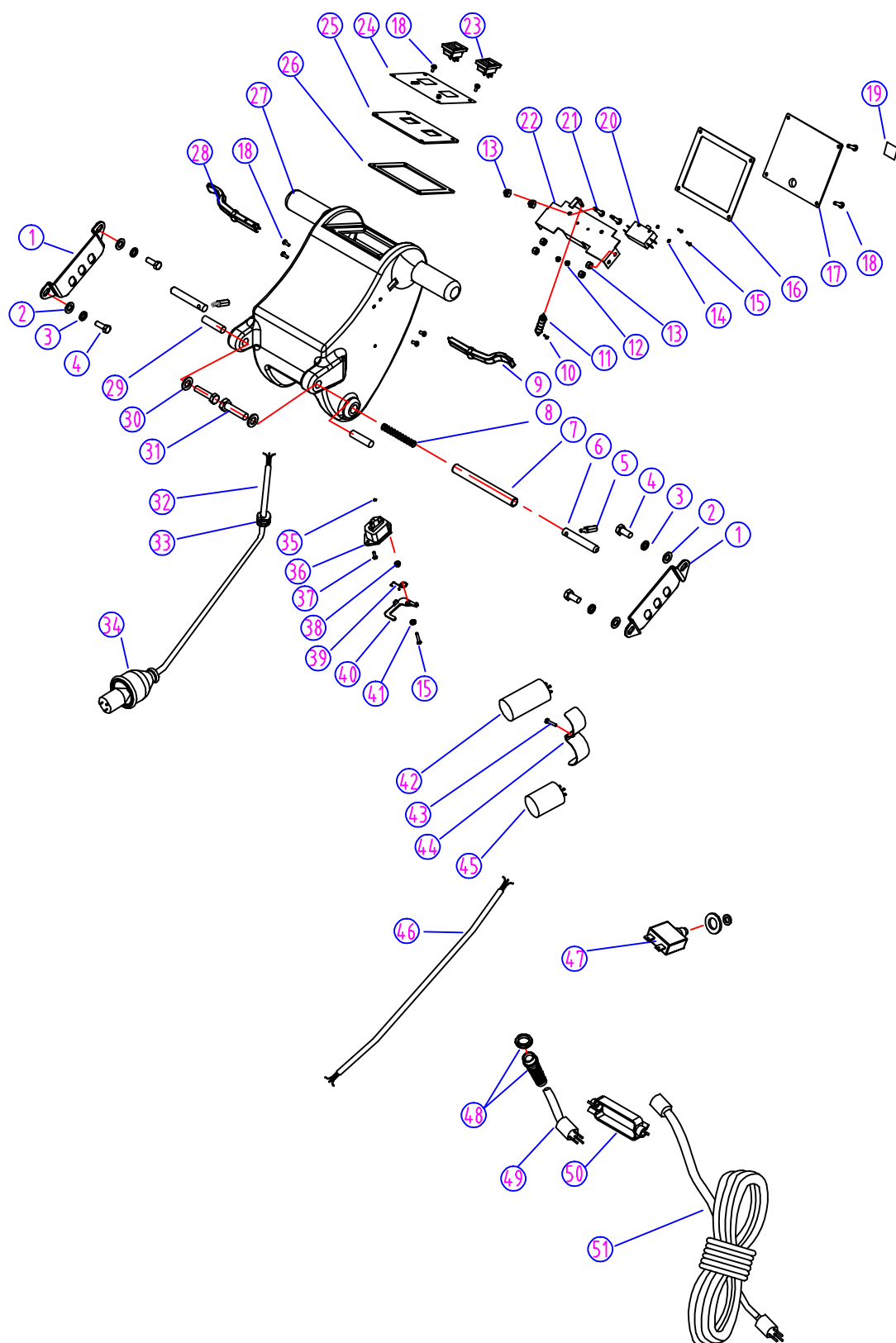


Revised 9/14

| DIA NO. | PART NUMBER | DESCRIPTION | NO. REQ'D |
|---------|-------------|--------------------------------|-----------|
| 1 | VF82010 | CLEAR COVER,RECOVERY TANK | 1 |
| 2 | VF82010B | GASKET,CLEAR DOME | 1 |
| 3 | VF82010A | RUBBER HINGE | 1 |
| 4 | VF13491 | SCREW, PH, M4 X 12 | 2 |
| 5 | VA13483 | WASHER, PLAIN, M4 | 4 |
| 6 | VA13477 | SCREW, ST, M4.2 X 16 | 2 |
| 7 | VF80343A | MODEL DECAL, RIGHT | 1 |
| 8 | VF80326A | "VIPER" LOGO | 1 |
| 9# | VF80302A | RECOVERY TANK | 1 |
| 10 | VF81503 | GASKET, MOTOR | 1 |
| 11 | ZD55000A | VACUUM MOTOR, 110V | 1 |
| 12 | VV10116 | TIE | 3 |
| 13 | VF80346 | SPRING | 1 |
| 14 | VF80356 | SPONGE, EXHAUST | 1 |
| 15 | VF80358 | PLASTIC COVER | 1 |
| 16 | VF80357 | HEAT RESISTANCE COVER | 1 |
| 17 | VF82310 | BOLT | 3 |
| 18 | VF13533 | WASHER, PLAIN, M6 | 7 |
| 19 | VF13502 | NUT, NYLON INSERT, M6 | 3 |
| 20# | VF80301A | SOLUTION TANK | 1 |
| 21 | VF14236 | BOLT, M8 X 40 | 1 |
| 22 | VF13514A | WASHER, PLAIN, M8 | 4 |
| 23 | VF82013 | WHEEL, 3" | 1 |
| 24 | VF80308 | SKIRT | 1 |
| 25 | VF80319A | BUMPER | 1 |
| 26 | VV20501 | SCREW, PH, M5 X 14 | 8 |
| 27 | VV13654 | WASHER, PLAIN, M5 X M9.5 X 0.8 | 6 |
| 28 | VF80355 | SCREW, SHOULDER, M10 X 16 X M8 | 2 |
| 29 | VV50712 | CLAMP | 1 |
| 30 | VV13607 | WASHER, LOCK, M6 | 4 |
| 31 | VF14200 | SCREW, PH, M6 X 16 | 4 |
| 32 | VF80349 | HOSE, OUTLET, BALL VALVE | 1 |
| 33 | VF82090 | CLAMP, HOSE | 4 |
| 34 | VF81403 | BARB, HOSE BRASS | 3 |
| 35 | VF80313 | BARB, HOSE | 3 |
| 36 | VF80348 | HOSE | 1 |
| 37 | VF80321 | MOUNTING PLATE, BALL VALVE | 1 |
| 38 | VF13495 | BOLT, M6 X 16 | 2 |
| 39 | VF80361 | BALL VALVE | 1 |
| 40 | VF46454 | FILTER | 1 |
| 41 | VF80306 | SEAL | 1 |
| 42 | VF80304 | FILL | 1 |
| 43 | VV13604 | BOLT, M8 X 20 | 2 |
| 44 | VF13519 | WASHER, LOCK, M8 | 2 |
| 45 | VF80359 | CLAMP, SQUEEGEE | 1 |
| 46 | VF80347 | SOLUTION HOSE | 1 |
| 47 | VF45117C | CORD | 1 |
| 48 | GV70034 | CLAMP DRAIN HOSE | 1 |
| 49 | VF80342A | MODEL LABEL, LEFT | 1 |
| 50# | VA93208C | DRAIN HOSE | 1 |
| 51 | VF81504 | FLOAT SHUTOFF | 1 |
| 52 | VV67305 | BEND | 1 |
| 53 | VF80345 | SCREEN | 1 |
| 54 | VF80331 | WARNING LABEL | 1 |
| 55 | VF80371 | KIT,LID | 1 |
| 56 | VA20104A | Ball stop | 1 |
| 57# | VF81403P | CONNECTER | 2 |

= Revised or new since last update

PARTS LIST

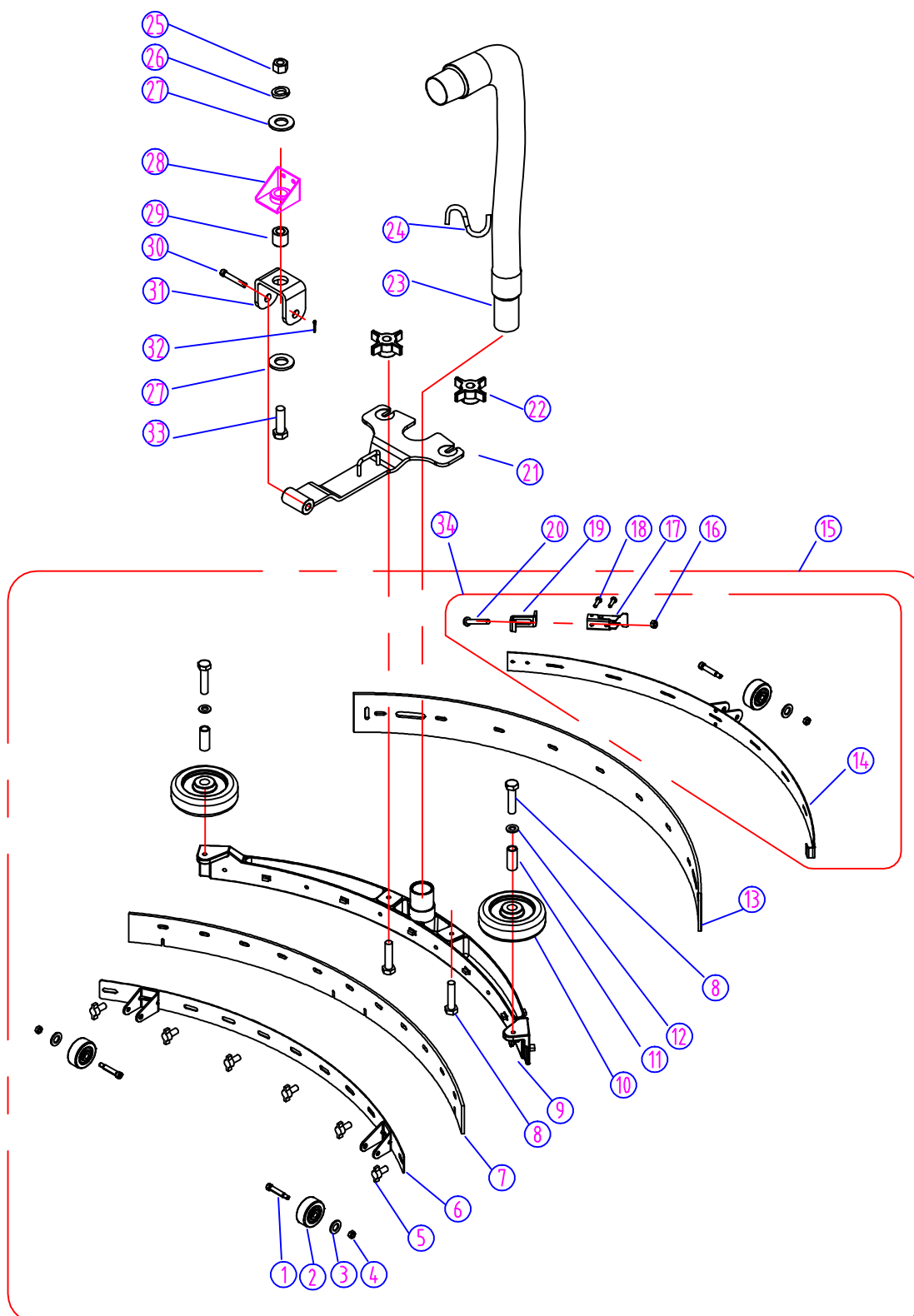


Revised 9/14

| DIA NO. | PART NUMBER | DESCRIPTION | NO. REQ'D |
|---------|-------------|------------------------------------|-----------|
| 1 | VF81408 | ADJUSTING PLATE | 2 |
| 2 | VF13535 | WASHER, PLAIN, M8 | 4 |
| 3 | VF13519 | WASHER, LOCK, M8 | 4 |
| 4 | VV13604 | BOLT, M8 X 20 | 4 |
| 5 | VF81710 | ADJUSTING SCREW | 2 |
| 6 | VF80322 | PIN, HANDLE LOCK | 2 |
| 7 | VF80323 | TUBE, HANDLE ADJUSTMENT | 1 |
| 8 | VF81716 | SPRING | 1 |
| 9 | VF80317BD | LEVER, SWITCH, LEFT | 1 |
| 10 # | VA13472 | SCREW, PH, M4 X 8 | 2 |
| 11 | VF81712 | SPRING | 1 |
| 12 | VV13652 | NUT, NYLON INSERT, M3 | 2 |
| 13 | VF13502 | NUT, NYLON INSERT, M6 | 6 |
| 14 | VF13511 | WASHER, PLAIN, M3 | 2 |
| 15 # | VF14212 | SCREW, PH, M3 X 25 | 2 |
| 16 | VF80335 | GASKET, REAR COVER | 1 |
| 17 | VF80310 | REAR COVER | 1 |
| 18 | VF14200 | SCREW, PH, M6 X 16 | 12 |
| 19 | VF80329 | DECAL, SERIAL | 1 |
| 20 # | SP-40263 | SWITCH | 1 |
| 21 | VF81711 | SCREW, SHOULDER, M8 X 20 X M6 | 2 |
| 22 | VF80307 | MOUNTING FRAME, SWITCH | 1 |
| 23 | VA91346 | SWITCH | 1 |
| 24 # | VF80324U | DECAL, SWITCH | 1 |
| 25 | VF80305 | SWITCH PANEL | 1 |
| 26 | VF80333 | GASKET, PANEL | 1 |
| 27 | VF80303A | CONTROL HOUSING | 1 |
| 28 | VF80318BD | LEVER, SWITCH, RIGHT | 1 |
| 29 | VF81713 | BUSHING | 2 |
| 30 | VF13537 | WASHER, PLAIN, M10 | 2 |
| 31 | VF14237 | BOLT, M10 X 70 | 2 |
| 32 | VF45120 | CORD | 1 |
| 33 | VV30182 | BUSHING, CORD | 1 |
| 34 | AS41902 | PLUG PROTECTOR, FEMALE | 1 |
| 35 # | VV13652 | NUT, M3 | 1 |
| 36 | VF51141 | RECEPTACLE | 1 |
| 37 # | VV14212 | SCREW, ST, 3 X25 | 1 |
| 38 | VF46716 | BUSHING | 1 |
| 39 | VF46718 | SPRING | 1 |
| 40 | VF46715 | BARB | 1 |
| 41 | VF46717 | WASHER | 1 |
| 42 | VV30142 | RUN CAPACITOR, 40uF / 375V | 1 |
| 43 # | VA13476 | SCREW, PH, M5 X 40 | 1 |
| 44 | VF80365 | CLAMP | 1 |
| 45 | VF999805 | START CAPACITOR, 380--400uF / 150V | 1 |
| 46 | VF80369 | CORD | 1 |
| 47 | VF99010D | CIRCUIT BREAKER, BRUSH | 1 |
| 48 | VF99008B | STRAIN RELIEF | 1 |
| 49 | VV67507 | PIG TAIL | 1 |
| 50 | VV67105 | CONNECTOR, CORD | 1 |
| 51 | VF80362C | POWER CORD | 1 |

= Revised or new since last update

PARTS LIST



| DIA NO. | PART NUMBER | DESCRIPTION | NO. REQ'D |
|---------|-------------|---|-----------|
| 1 | VF81222 | SCREW, HEX SOCKET, SHOULDER, 5/16 X 1.25" | 3 |
| 2 | VF81219 | WHEEL, 2" | 3 |
| 3 | VF13535 | WASHER, PLAIN, M8 X M20 X 2 | 3 |
| 4 | VV20203 | NUT, NYLON INSERT, 5/16" | 3 |
| 5 | VF82121 | KNOB, M6 | 6 |
| 6 | VF82118 | BACK UP STRIP, SQUEEGEE, FRONT | 1 |
| 7 | VF82062 | BLADE, SQUEEGEE, FRONT | 1 |
| 8 | VF14236 | BOLT, M8 X 40 | 4 |
| 9 | VF82116 | HOUSING, SQUEEGEE | 1 |
| 10 | VF82013 | WHEEL, 3" | 2 |
| 11 | VF82055 | BUSHING | 2 |
| 12 | VF13514A | WASHER, PLAIN, M8 X M16.5 X 1 | 2 |
| 13 | VF82063 | BLADE, SQUEEGEE, REAR | 1 |
| 14 | VF82120 | BACK UP STRIP, SQUEEGEE, REAR | 1 |
| 15 | VF82908A | SQUEEGEE ASSY | 1 |
| 16 | GT13022 | NUT, NYLON INSERT, M5 | 1 |
| 17 | VF81218 | LATCH, HOOK | 1 |
| 18 | VF81208 | RIVET, M4 X 5 | 2 |
| 19 | VF81209 | HOOK | 1 |
| 20 | VF14305 | SCREW, M5 X 60 | 1 |
| 21 | VF80422 | BRACKET, SQUEEGEE, MOUNT | 1 |
| 22 | VF81210 | KNOB, M8 | 2 |
| 23 | VF80425 | HOSE | 1 |
| 24 | VF83150 | CLAMP, HOSE | 1 |
| 25 | VF14057A | NUT, M12 | 1 |
| 26 | VF13541 | WASHER, LOCK, M12 | 1 |
| 27 | VV20434 | WASHER, PLAIN, M13 X M30 X 3 | 2 |
| 28 | VF80109 | CONNECTOR | 1 |
| 29 | VF80427 | BUSHING | 1 |
| 30 | VF14094 | PIN, M12 X 70 | 4 |
| 31 | VF80426 | "U" SHAPE FRAME | 1 |
| 32 | VF14095 | PIN, M4 | 1 |
| 33 | GT13085 | BOLT, M12 X 40 | 1 |
| 34 | VF82120A | KIT,SQUEEGEE REAR BACKUP STRIP | 1 |

Wiring Diagram

