



# ES (EXTENDED SCRUB) KIT (230V Model)

## INSTALLATION INSTRUCTIONS:

(Installation Time: 1 hour)

### TOOLS REQUIRED:

11/16" & 1-1/8" Wrench, 13mm Socket Wrench, Std. & Philips Head Screwdriver, Power Drill w/ 11/16" (18mm) Drill Bit.

5100 ES™ KIT CONTENTS			
Ref.	P/N.	Description	Qty.
1	180109	Pump, 100psi, 230V	1
2	606363	Hose, 0.38ID 0.60OD	1.083 FT.
3	210044	Valve, Check	1
4	140316	Clamp, Insulated	1
5	140000	Washer, Flat 1/4"	1
6	140016	Washer, 1/4 Lock	1
7	54333	Hose Clamp, 0.31-0.88	5
8	630385	Fitting, Plstc Str PM12/PM12	1
9	601484	Fitting, Str PF12/1" F Reducer	1
10	578445	Filter, Screen	1
11	603166	Switch, Float	1
12	601416	Panel, Accessory	1
13	582508	Timer, Relay	1
14	578008000	Screw, M05x31	1
15	140293	Screw, M5x.8x30	4
16	19066	Washer, Flat #10	4
17	09739	Nut, Hex Lock M5x0.8 NL	5
18	578005000	Switch, Rocker	1
19	130691	Light, Indicator Green	1
20	582150	Plug, Accessory Switch	1
21	603969	Asm., Wire White 7" w/Piggy back	1
22	604751	Asm., Wire #66, Black w/piggy back	1
23	604752	Asm., Wire #33/#35 White	1
24	604753	Asm., Wire #26/#28 Orange	1
25	604754	Asm., Wire #42/#50 Brown	1
26	604755	Asm., Wire #68/#70 Red	1
27	700970	Asm., Wire 6" Green w/ ring term.	1
28	130142	Connector, Butt (red)	1
29	130133	Terminal, M disconnect	2
30	608322	Screw, TRS M6X1.0X16 PHL	1
31	582514	Circuit Breaker	1
32	578734	Boot, Circuit Breaker	1
33	606317	Hose, 0.38ID 0.60OD	1.625 FT.
34	376720	Hose, 0.38ID 0.60OD	3.333 FT.
35	150538	Fitting, Plstc Str PM06/BM06	1
36	630252	Fitting, Brs PM12/PF06 Bushing	1
37	150412	Fitting, Plstc E90 PM06/BM06	2

### Prepare Machine for Installation:

- Drain tanks of all water.
- Remove squeegee assembly.
- Remove front cover.

### Begin Installation:

>**NOTE:** Follow each Step in conjunction with diagram on page 2.

- Remove recovery tank from main housing.
- Remove plug located on bottom side of recovery tank and attach fittings (ref. 36 & 35) to tank as shown. Use pipe tape for all threaded fittings.

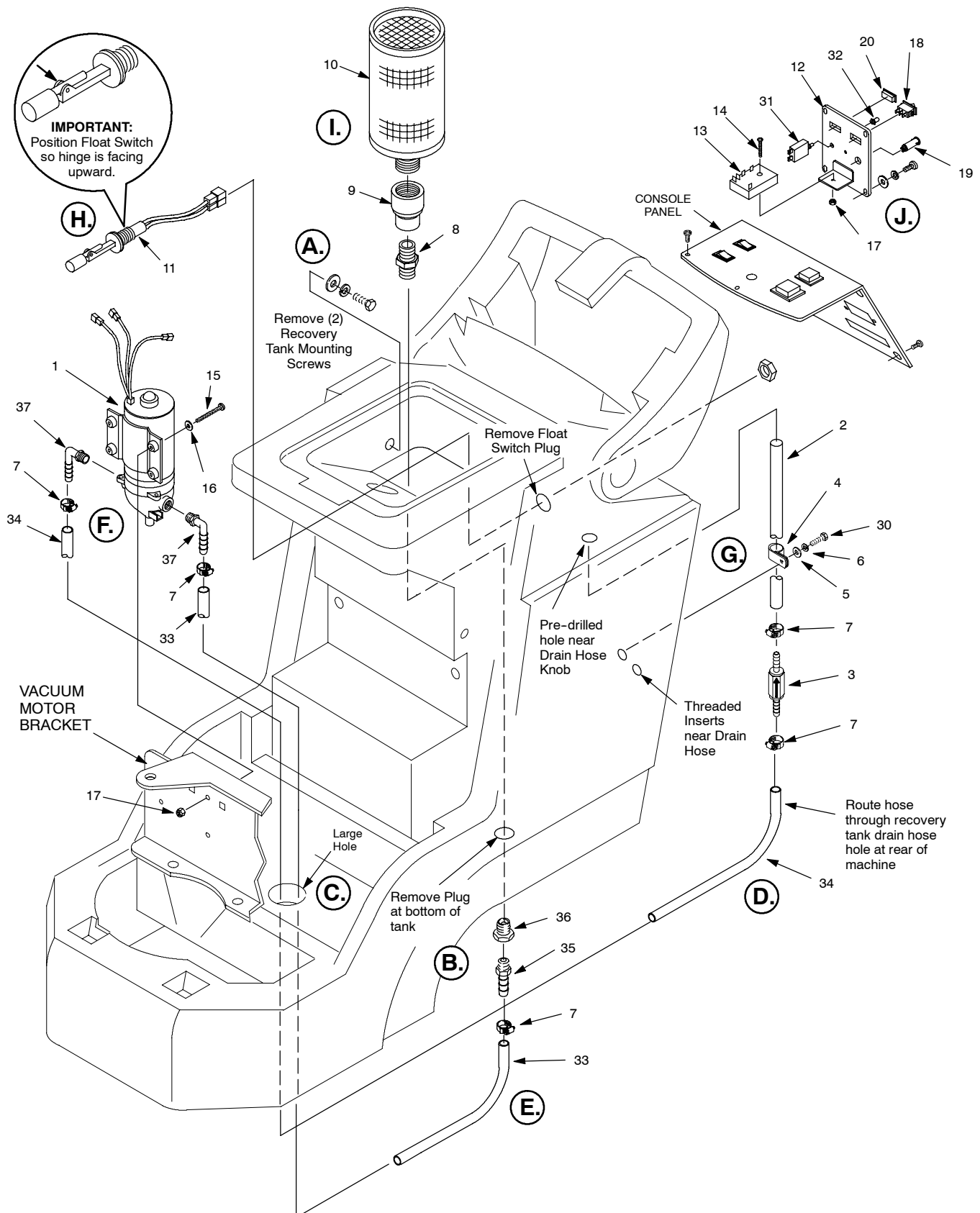
- Route hoses (ref. 33 & 34) through large hole in machine housing base and direct them toward rear of machine as shown.
- Continue to route hose (ref. 34) through the recovery tank drain hose hole at rear of machine.
- Connect hose (Ref. 33) to fitting (Ref. 35) at bottom of recovery tank, use screw clamp (ref. 7).

Replace recovery tank after connecting hose. You may have to rotate drain hose clamp to allow space for hose (ref. 34).

- Thread two elbow fittings (ref. 37) into ES pump (ref. 1) and position elbows as shown. Mount ES pump to vacuum motor bracket, using hardware (ref. 15, 16, 17). Connect hoses (ref. 33 & 34) to pump as shown.
- Assemble parts ( ref. 2, 3, 4, 5, 6, 7 & 30) and fasten to rear of machine as shown. Point arrow on check valve away from pump. Connect hose (ref. 34) to check valve. Push hose (ref. 2) up through pre-drilled hole, located near drain hose knob, and direct it to left side of machine.
- Remove float switch plug from backside of recovery tank. From inside recovery tank, insert float switch (ref. 11) through hole and secure with nylon nut. Position hinge on float switch so it faces upward.
- Attach fittings (ref. 8 & 9) to filter screen (ref. 10) then thread screen into hole at bottom of recovery tank as shown. Use Teflon tape for all connections.
- Mount electrical components to accessory panel as shown (ref. 12, 13, 14, 9, 18, 19, 20, 30, 31, 32). Then remove blank panel from console panel and replace with accessory panel. Now remove console panel from machine to access internal wiring. Do not disconnect any wiring.
- Follow Wiring Diagram on page 3 for ES kit wire connections.
- Reinstall console panel and front cover.
- Refer to Operator Manual for ES Operating Instructions.

## ES KIT INSTALLATION INSTRUCTIONS

>**NOTE:** Follow each Step in conjunction with written instructions on page 1.



## ES KIT INSTALLATION INSTRUCTIONS

## WIRING DIAGRAM

