ESCORT WINDSOR®



INSTRUCTION MA

CARE



Models ESC/EPB



INDUSTRIES, INC., 1351 W. Stanford Ave., Enalewood, CO 80110 USA • 303/762-1800 • FAX 303/762-0817

INSPECTION

Carefully unpack and inspect your extractor for shipping damage. Each unit is operated and thoroughly inspected before shipping, and any damage is the responsibility of the carrier who should be notified immediately.

ELECTRICAL

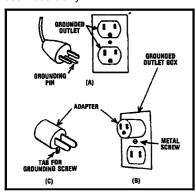
This extractor operates on a standard 15 amp, 115 volt AC circuit.* Voltages below 105 volts or above 125 volts could cause serious damage to motors. *230 volt 50 hz model available.

WARNING: Make sure you are using the correct voltage as **specified** on nameplate before connecting machine power cord to outlet.

GROUNDING INSTRUCTIONS

To protect the operator from electric shock, this machine must be grounded while in use. The machine is equipped with an approved three-conductor power cord and three-prong grounding type plug to fit the proper grounding type receptacle. The vacuum power cord has a plug as shown in Fig. A. if a receptacle connected to the electrical ground as shown in Fig. A is not available use an adapter as shown in Fig. C. The adapter must be connected to an electrical ground in the electrical outlet, using metal screw shown in Fig. B.

WARNING: To avoid electric shock, use indoors only.



EXTENSION CORDS

if an extension cord is used, the wire size must be at least one size targer than the power cord on the machine and must be limited to 50 feet in length. The ESCORT is equipped with a 50 ft. 14/3 power cord.

EQUIPMENT SETUP

NOTE: Attach strain rellef/cord retainer to power cord.

- Make loop in power cord ap-proximately 12* rom twist lock receptacle end.
- Slide cord loop through slot in retainer and over retainer arm. Pull slack cord back through slot to secure



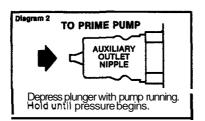
- 3. Plug power cable from machine into properly grounded wall outlet.
- Using a clean container, fill solution tank with hot water. The maximum capacity of the ESCORT is 7 gallons. Mix in a nonfoaming cleaning concentrate for use in hot water extraction machines at the proportions noted on the container for various carpet soil conditions.

NOTE: When using a powder cleaner, premix with hot water in clean container before adding to solution tank.

OPERATING THE ESCORT

NOTE: Vacuum the carpet and make sure it is cleared of surface debris before starting the cleaning process.

NOTE: Pump Priming: If the machine has been in storage or the pump runs dry—air entrapment within the solution line can occur. This is alleviated by depressing the tip of the auxiliary nloole momentarily while the pump is running.



Dispense solution by using either the continuous flow switch for large open areas or the intermittent switch for cleaning smaller more confined areas. If machine is equipped with power brush Switch on power brush, depress pedal to Lower brush head assembly. Walking backwards move the machine over the area to be cleaned. Turn solution off about 8 inches be fore the end of each pass to insure all solution is removed from the carpet. When through cleaning depress pedal to Raise brush head assembly. Switch off vac and brueh switches.

WARNING: Do not leave power brush running when machine is not in cleaning mode. Damage to carpet could occur.

2 As you work, check to see if there is a foam buildup in the recovery tank. if there is a foam buildup, turn the machine off and add the recommended amount of a defoaming solution to the recommended. the recovery tank

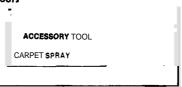
NOTE: Never put defoamer in the solution tank.

WARNING: An overflow of foam into the vacuum intake can damage the vac motor. Always be aware of the waste water level in the recovery tank. When the tank is about three-quarters full, turn off the machine, re-move drain hose from keeper and empty dirty water into bucket or floor drain.

When machine runs out of cleaning solution, turn off the machine and refill the solution tank. Turn machine on and continue cleaning process.

PER TING THE ITH ACCESSOR

The I can easily be d for Windsor hand tools and floor USA 1 tools



NOTE: Tur necting any i€ off before con-

- 1. Turi solution control valve pet spray" to accessory Dia 3.)
- 2 Remove dome and insert tool in its CL for a L:
- Attach solution hose from accessory tool to solution outlet nipple on back if of machin
- vialle sur il it sufficient am pler ning il li ion is ir ic utili and that il e dome is a pla Ωf tank early for operation.
- 5. Turn or vacu pump switches. and

CAUTION: Do not switch on power brush when using ESCORT with accessory tools.

NOTE: Make sure the solution control valve is returned to the "carpet spray" position before using ESCORT for carpet cleaning.

DAILY/REGULAR MAINTENANCE

WARNING: Before making any adjustments or repairs to the machine disconnect the power cord from electrical

- Empty unused cleaning solution from solution tank.
- 2 inspect and clean filter screen in solution tank.
- Flush pumping system with 1 to 2 gallons of clean hot water.
- Empty and clean recovery tank with
- Checkspray jets daily for full spray
- Check for and remove any debris or lint buildup from vac shoe.
- On power brueh models remove lint and dirt build-up from brush and housing.

PERIODIC MAINTENANCE

- Twice a month flush a white vinegar solution (one quart vinegar to one gallon of hot water) or an anti-browning solution (mixed as directed) through the ESCORT. This will help prevent buildup of alkaline residue in system.
- 2 if spray jete become clogged, remove the spray tips, wash them throughly in vinegar and blow dry.

NOTE Do not use pins, wires, etc. to clean jets as this will destroy spray

- if spray jets continue to drip after solution pump Is turned off, the soienoid valve will need cleaning. (See MAINTENANCE on Solenoid Valve.)
- 4. Periodically inspect ail crucables, and son your n Becal strik cable will son wet ar at importable sortion is kept if the cable in t

PROTECT FROM FREEZING

if it becomes necessary to store the machine in temperatures below 40°, the pumping system, valves, etc. must be protected from freezing with a methyl hydrate (window washer) antifreeze solution.

NOTE: Do not use ethylene giycoie or cooling system antifreeze.

 Add window washer antifreeze to the solution tank. Turn on pump until solution sprays out of jets. Remove unused portion of antifreeze from tank

MAINTENANCE INSTRUCTIONS FOR ESCORT AND ESCORT w/POWER BRUSH

WARNING: Remove machine power cord from electrical source before making any repairs or adjustments to the machine.

TO ACCESS VAC MOTOR/ PUMP ASSEMBLY

Remove solution from both tanks.

 SOLUTION TANK Attach the 4 ft. vac hose, supplied with machine, to dome. Switch on vac motor and vacuum unused solution into recovery tank

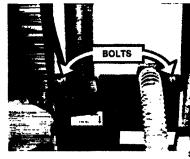


2. RECOVERY TANK Remove drain hose from keeper and empty solution into bucket or floor drain.



VACUUM MOTOR

1. Remove (2) tank mounting bolts from rear chassis panel.



2 Lift up recovery tank to access vac exhause hose. Disconnect hose from vac motor, motor wire leads and remove tank/vac motor.



3. To inspect motor brushes, remove brush holder assembly. Brushes should be replaced when worn to 3/8 inch or after about 250 operating hours. After second brush replacement the armature commutator should be checked for pitting and concentricity. Vac motors can be repaired but such repairs should be made by a quaiifled motor repair shop.

NOTE: When reinstalling tanklyac motor make sure the vac recovery hose is routed **ABOVE** exhaust horn on vac motor.



SOLENOID VALVE

if the machine continues to drlp solution from manifold after pump is switched off check for: (A) Alkaline build up in solution lines (B) Lint or debris lodged in solenold valve.

- Remove (2) tank mounting bolts from rear chassis panel. (Refer to Photo 3).
 Remove recovery tanklyac motor assembly.
- 2 Remove left wheel to access valve retaining screws.



Remove iniine solenoid valve: Clean, repair or replace a8 required.

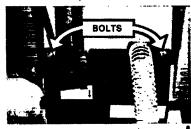


CAUTION: When installing solenoid valve make sure that solution flow direction as indicated on valve is toward manifold.

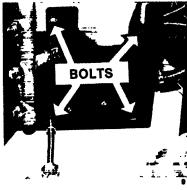
PUMP ASSEMBLY

NOTE: On power brush 1 21 r m all of brush heads is 11 k to 21 is pump. (See Power Head F

 Remove (2) tank mounting boits from rear chassis panel.



2 Lay machine on right side and re. mow (4) bolts holding pump mounting plate.



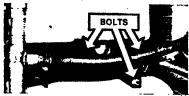
3. Disconnect pump motor wire leads. Disconnect solution hoses from pump head and remove pump. Refer to pump drawling for replacement parts.



CAUTION: When replacing hose barbs on pump head — DO NOT OVERTIGHTEN — as this could crack in pump head.

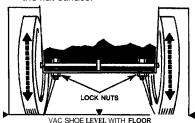
VAC SHOE

- Remove (4) bolts holding chassls and pump plate to tanks. (Refer to Photos 3 & 9)
- Remove (3) bolts hoiding vac shoe/ bracket to soiutlon tank. Repair or replace as required.



NOTE When reInstalling a new vac shoe, proper alignment of shoe to floor must be made.

- Install vac shoe and tighten screws. Attach chassis and pump plate assembly to tank and tighten screws.
- Set machine upright on a flat-level surface (a desk top works well) and check vac shoe for level contact on the fiat surface.



 Make adjustment at axle leveling screws by tightenin /loosening both of the lock nuts unti? shoe is level.

TRANSPORT WHEELS

 Remove screw and hub cap and slide wheel off axle. Before reinstalling wheel, clean axle and apply light coating of silicone lubricant.



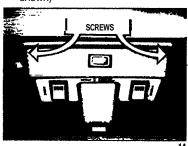
VAC MOTOR EXHAUST FILTER

- 1. Remove (4) bolts holding chassis to tanks. (Refer to Photos 3 & 9)
- 2 Lay machine on side. Pull chassis from tanks to expose exhaust muffler.
- 3. Remove hex nut from PVC muffler. Repair or replace as required.



SWITCH CONTROL PANEL

 Remove (2) screws holding switch housing to handle. (EPB housing shown)

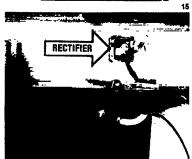


2 Replace switches as required.

SERVICING POWER HEAD BRUSH MOTOR/RECTIFIER

- 1. Tilt machine back to rest on handle.
- Remove(6) screws holding motor and plate to housing. Repair/replace motor rectifier as needed.





BELT ADJUSTMENT

 When servicing brush motor or brush assembly always check belt for proper tension. The belt should be taut to prevent it from sllpping on cogged pulleys. To tighten belt, loosen motor mounting nuts and rotate motor rearward just enough to tlahten belt.



BRUSH/BEARING ASSEMBLY

1. Remove belt guard.

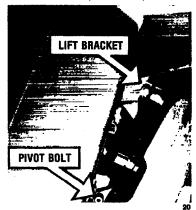


2 Remove screw from each end of brush shaft and remove brush assembly from housing. Replace brush or bearrings as needed.



POWER HEAD LIFT CABLE

- Remove recovery tank/vac motor assembly.
- 2 Tilt machine back to rest on handle. Remove bolt holding cable to lift bracket and (2) power head pivot bolts.



3. Remove guide pulley bracket assembly and remove cable from pulley.



Remove pedal and bracket assembly (4 screws). Replace cable as required.



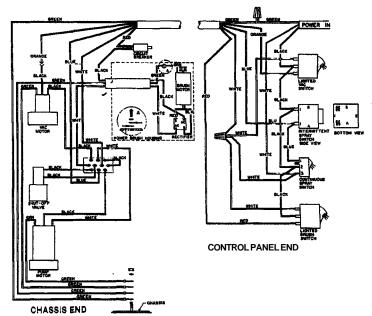
Reinstall pedal assembly and power head assembly. To adjust cabic Depress cable so that power head almost touches vac shoe housing. Raise and lower power head with pedals to make sure that head will "lock" In UP position when pedal is depressed.

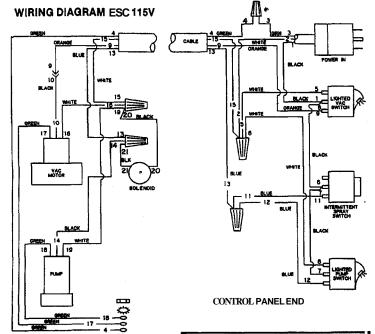
POWER HEAD REMOVAL

- Tilt machine back to rest on handle. Remove brush motor and plate assembly. (SeePhoto 15)
- 2 Disconnect power cord from rectifier, Loosen strain relief and pull cord from housing. (SeePhoto 16)
- Remove cable from lift bracket and (2) plvot bolts. (See Photo 20)
 Disconnect solution hose from elbow and lay head aside.

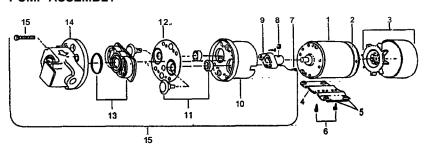


WIRING DIAGRAM EPB CHASSIS ASSEMBLY





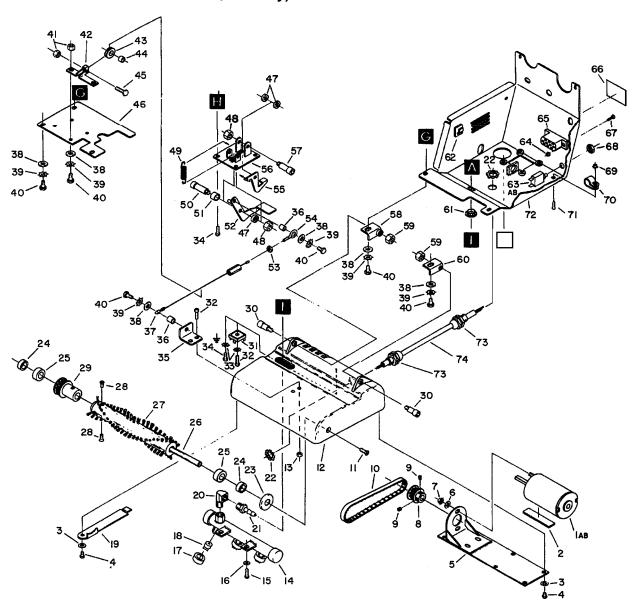
PUMP ASSEMBLY



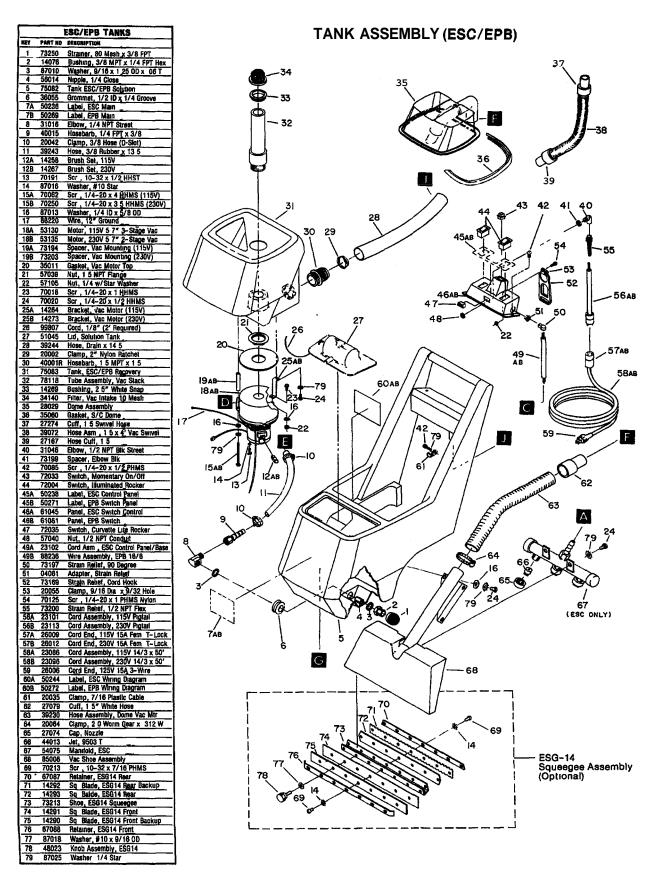
CHASSIS END

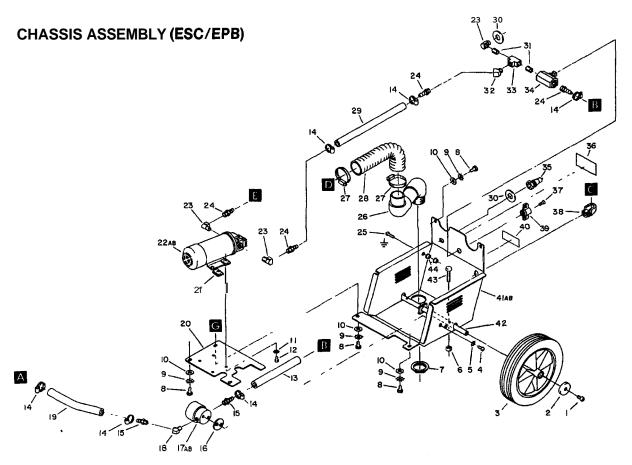
| PUMP PARTS LIST | | | | | |
|--------------------|----------|-----------------------------------------|--|--|--|
| KEY | PART NO. | DESCRIPTION | | | |
| 1 | 53118 | Molor 115V (for 65067) | | | |
| 1A | 53119 | Motor 230V (for 65070) | | | |
| 2 | 67071 | Rectifier/End Bell Asm. 115/230V | | | |
| 3 | 47075 | Fan/Shroud Asm | | | |
| 4-5-6 | 47076 | Kit, Base Plate | | | |
| 7-8-9-11- 12-13 | 47087 | Kit. Pump Repair (tor 65067 & 65070) | | | |
| 10 | 27225 | Bearing Cover_ | | | |
| 14 | 41086 | Pump Housing | | | |
| 15A | 65071 | Pump Head Asm. 115V (for 65067) | | | |
| 15B | 65072 | Pump Head Asm. 230V (for 65070) | | | |

POWER BRUSH ASSEMBLY (EPBOnly)



| | POWER BRUSH ASSEMBLY (EPB Only) | | | | | | | | | | |
|-------|---------------------------------|------------------------------|-----|----------|-------------------------------|-----|----------|--------------------------------|-----------|----------|----------------------------------|
| KEY | PART NO. | DESCRIPTION | KEY | PART NO. | DESCRIPTION | KEY | PART NO. | BESCRIPTION | KEY | PART NO. | BESCRIPTION |
| I JA. | 53146 | Motor, 115V DC Brush Drive | 19 | 62134 | plate, Belt Cover | 38 | 87013 | Washer, 114 ID x 5/8 00 | 57 | 70218 | Shoulder Bolt, 3/8 OD x 3/4 L |
| 1B | 53147 | Motor, 230V DC Brush Drive | 20 | 31016 | Elbow, 1/4 NPT Street | 39 | 87026 | Washer, 1/4 Star | 58_ | 14277 | Bracket, Right Hanger |
| _2 | 35071 | Gasket, 1/8 x 1 x 5 | 21 | 40014 | Hosebarb, 114 MPT x 3/8 | 40 | 70020 | Scr., 1/4-20 x 1/2 HHMS | 59 | 57092 | Nut, 5/16-18 Lock |
| 3_ | 87014 | Washer, #8 Int Star | 22 | 57040 | Nut, 1/2 NPT Conduit | 41 | 57047 | Nut, 1/4-20 Lock | <u>80</u> | 14276 | Bracket, Left Hanger |
| 4 | 70052 | Scr., 8-32 x 3/8 PHMS | 23 | 36052 | Guard, EPB Thread | 42 | 14278 | Bracket, Cable Roller | 61 | 14294 | Bushing, 3/4 ID Snap |
| 5 | 62135 | Plate Assembly, Motor | 24 | 73202 | Spacer, EPB Brush | 43 | 64034 | Roller | 62 | 20056 | Clip, Wire Self Adhesive |
| 6 | 87018 | Washer, #10 x 9/16 0D | 25 | 09022 | Bearing, EPB | 44 | 73206 | Spacer, .259 ID x 3/8 OD x 1/2 | 63A | 14295 | Breaker, 1.5A Circuit |
| 7 | 57104 | Nut, 10-32 w/Star Washer | 26 | 03032 | Axle, EPB Brush | 45 | 70018 | Scr., 1/4-20 x 1 HHMS | 638 | 14308 | Breaker, 0.8 Thermal Circuit |
| 8 | 64046 | Pulley, EPB Motor 3/8 Shaft) | 27 | 12001 | Brush, EPB | 46 | 62130 | Plate, Pump | 64 | 57116 | Nut, 6-32 w/Star Washer |
| 9 | 70084 | Set Scr., 8-32 x 3/16 KCP | 28 | 70177 | Scr., 10-32 x 1/2 FHMS | 47 | 73208 | Spacer, 3/4 OD x .208 W Nylon | 65 | 14020 | Terminal Block (3-4-3) |
| 10 | 11017 | Bett, EPB | 29 | 64032 | Putley, EPB Brush | 48 | 57113 | Nut, 5/16-18 Lock | 66 | 50267 | Label, Raise/Lower Brush |
| 11 | 70043 | Scr., 10-32 x 5/8 FHMS | 30 | 70218 | Shoulder Bolt, 3/8 00 x 1/2 L | 49 | 73210 | Spring, Pedal Release | 87 | 70210 | Scr., 6-32 x 3/4 PHMS Bik Nylon |
| 12 | 41106 | Housing, EPB Brush | 31 | 67029 | Rectifier, Bridge | 50 | 70217 | Shoulder Bolt, 3/8 QD x 1.25 L | 68 | 57024 | Nut, 3/8-27 Panel |
| 13 | 57030 | Nut, 10-32 Lock | 32 | 70066 | Scr., 10-32 x 3/4 PHMS | 51 | 73219 | Spacer, .57 OD x 3/4 L Nylon | 69 | 57106 | Nut, 8-32 w/Star Washer |
| 14 | 54083 | Manifold, EPB | 33 | 87016 | Washer, #10 Star | 52 | 66076 | Pedal Assembly, Left | 70 | 20035 | Clamp, 7/16 Plastic Cable |
| 15 | 70162 | Scr., 10-32 x 3/8 PHMS | 34 | 70088 | Scr., 10-32 x 1/2 PHMS | 53 | 57005 | Nut, 10-24 Hex | 71 | 70012 | Scr., 8-32 x 1/2 RHMS |
| 16 | 87016 | Washer, #10 Star | 35 | 14280 | Bracket, Brush Housing Lift | 54 | 70223 | Eyebolt, 3/16 w/10-24 Nut | 72 | 34128 | Frame, EPB Main |
| 17 | 27074 | Cap, Nozzie | 36 | 73220 | Spacer, EPB Cable | 55 | 68078 | Pedal, Right | 73 | 73168 | Strain Relief, LIQ TITE |
| 18 | 44047 | Jet, 8003 Tee Brass | 37 | 27265 | Cable Assembly, EPB Lift | 56 | 14275 | Bracket Assembly, EPB Pedal | 74 | 88235 | Wire Assembly, EPB Motor Housing |





| ESWEPB CHASSIS | | | | | | | | |
|----------------|----------|-------------------------------|-----|----------|----------------------------------|--|--|--|
| KEY | PART NO. | DESCRIPTION | KEY | PART NO. | DESCRIPTION | | | |
| 1 | 70085 | Scr., 1/4-20 x 1/2 PHMS | 23 | 31016 | Elbow, 1/4 NPT Street | | | |
| 2 | 27266 | Cap, Wheel Hub | 24 | 40014 | Hosebarb, 1/4 MPT x 3/8 | | | |
| 3 | 89044 | Wheel, Grey 10" x 1 75 W | 25 | 70066 | Scr , 10-32 x 3/4 PHMS | | | |
| 4 | 70162 | Scr , 10-32 x 3/8 PHMS | 26 | 54077 | Muffler, Vac Exhaust | | | |
| 5 | 87016 | Washer, #10 Star | 27 | 20064 | Clamp, 2 0 Worm Gear x 312 W | | | |
| 6 | 57047 | Nut, 1/4-20 Lock | 28 | 39247 | Hose, Vac Exhaust x 19" | | | |
| 7 | 57039 | Nut, 1 5 NPT Flange | 29 | 39032 | Hose, 3/8 Rubber x 15" | | | |
| 8 | 70020 | Scr , 1/4-20 x 1/2 HHMS | 30 | 87015 | Washer, 9/16 ID x 1 06 0D | | | |
| 9 | 87025 | Washer, 1/4 Star | 31 | 56014 | Nipple, 1/4 Close | | | |
| 10 | 87013 | Washer, 1/4 ID x 5/8 0D | 32 | 31021 | Elbow, 1/4 NPT 45 D Street | | | |
| 11 | 87016 | Washer, #10 Star | 33 | 78156 | Tee, 1/4 FPT | | | |
| 12 | 70088 | Scr , 10-32 x 1/2 PHMS | 34 | 84065 | Valve, 1/4 FPT Ball | | | |
| 13 | 39250 | Hose, 3/8 Rubber x 12" | 35 | 56012 | Nipple, 1/4 FPT QD | | | |
| 14 | 20042 | Clamp, 3/8 Hose (D-Slot) | 36 | 50198 | Label, Warning & Caution | | | |
| 15 | 40029 | Hosebarb, 1/8 MPT x 3/8 | 37 | 70091 | Scr , 10-24 x 1/2 FHMS | | | |
| 16 | 73239 | Spacer, Valve | 38 | 73197 | Strain Relief, 90 D | | | |
| 17A | 84050 | Valve, 115V Solenoid Shut-Off | 39 | 48028 | Knob, Yellow Ball Valve | | | |
| 17B | 84051 | Valve, 230V Solenoid Shut-Off | 40 | 50232 | Label, Valve Position | | | |
| 18 | 31028 | Elbow, 1/8 NPT 45 D Street | 41A | 34114 | Frame, ESC Main | | | |
| 19 | 39049 | Hose, 3/8 Rubber x 11" | 41B | 34128 | Frame, EPB Main | | | |
| 20 | 62130 | Plate, Pump | 42 | 03030 | Axle, Wheel | | | |
| 21 | 57081 | Nut, 10-32 Captive J | 43 | 70297 | Scr , 14-20 x 1 50 Full Thd HHMS | | | |
| 22A | 65067 | Pump, 115V 100 PSI By-Pass | 44 | 57104 | Nut, 10-32 w/Star Washer | | | |
| 22B | 65070 | Pump, 230V 100 PSI By-Pass | | | _ | | | |

WINDSOR LIMITEDWARRANTY

WINDSOR LIMITEDWARRANTY
WINDSOR warrants to the original purobase/user that this product is free from
defects in workmanship and materials
under normal use and service for a period
of one year from date of purchase. WIND
SOR will at its option, repair or replace
without charge, except for transportation
costs, parts that fail under normal use
and service when operated and maintained in accordance with the applicable
operation and instruction manuals. This
warranty does not apply 10 normal wear,
or to items whose life is dependent on
their use and care, such as cords,
switches, hoses, rubber parts, electric
motor parts, etc

This limited warranty is in lieu of all other warranties, expressed or implied and releasesWINDSOR from all other obligations and liabilities It is applicable only in the USA and Canada, and is extended only to the original user/purchaser of this product WINDSOR is not responsible for costs for repairs performed by persons other than those specifically authorized by WINDSOR This warranty does not apply to damage from Iransportation, alterations by unauthorized persons misuse a abuse of the equipment, use of noncompatible chemicals, or damage to property, or loss of income due to malfunctioning of the product.

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