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# **USER MANUAL**

**MODEL NUMBER:  
FI-50NT-HV  
AND RELATED UNITS**

**50 GALLON PORTABLE FOAMER WITH  
GP34T AND 50 FT 1 INCH HOSE**

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**English (Original Instructions)**

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## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

# **WARNING**



### **Read this manual completely and understand the machine before operating or servicing it.**

- Read all instructions before installing or operating unit.
- Always wear appropriate personal protective equipment (PPE) when operating or servicing unit.
- Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).
- If this unit is modified or serviced with parts not listed in this manual, the unit may not operate correctly.
- Never point the discharge wand at yourself, another person, or any object you do not want covered in chemical.
- Always depressurize unit after use (as described in the After Use Instructions). Always store unit depressurized, with the discharge ball valve in the closed position.
- Do not exceed an incoming air pressure of 100 psi (7 bar).
- Do not exceed a fluid temperature of 100°F (37°C).
- Always flush the unit with fresh water for 5 minutes when switching from an alkaline to an acid or an acid to an alkaline.
- Never use unit with hydrocarbons or flammable products.
- Only use clean and dry air. Air must be filtered and free of moisture or pump life will be diminished. If needed, install an air dryer before unit.
- Do not use an air lubricator before the unit.
- Never use unit if it is damaged or leaking.
- Disconnect unit from electrical power source before servicing.

### **PROTECT THE ENVIRONMENT**

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe way according to local waste disposal regulations.



Always remember to recycle.

\*Specifications and parts are subject to change without notice.

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REQUIREMENTS	
Compressed air requirements	40-100 psi (2.1-6.9 bar) with 12-20 cfm (339.8-566.3 l/min)
Liquid temperature range	40-100°F (4.4-37°C)
Chemical compatibility	Chemical products used with this equipment must be formulated for this type of application and compatible with unit materials and pump seals. For more information on chemical compatibility, consult the manufacturer or SDS for your product or contact our customer service department.

SPECIFICATIONS	
Power type	Compressed air
Chemical pickup type	Draws from pre-mixed solution
Number of products unit can draw from	One product
Suction line length/diameter	3/4 in. (19 mm) inside diameter
Capacity	50 gallons (189.27 liters)
Discharge hose diameter/length	50 ft. (15.24 m) hose, with 1 in. (25.4 mm) inside diameter
Discharge wand/tip type	10 in. (2.54 cm) stainless steel wand with zero tip and ball valve
Output distance	40 ft. (12.19 m)
Output volume	92 gal/min (348.26 l/min) of foam
Flow rate*	5 gal/min (18.93 l/min)
Pump seals	Teflon
Wheel type	Two 10 inch non-marking wheels, two 5 inch casters with lock

\*Dilution rates and flow rates given are based on chemical with viscosity of water and factory air pressure settings.

## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### Operation Instructions:

Always follow all chemical safety precautions and handling instructions provided by the chemical manufacturer and Safety Data Sheet (SDS).

1. Follow all instructions from chemical manufacturer. Fill the tank with water and the advised percentage of chemical concentrate.
2. With ball valve (HV60-34) in the closed position, plug an air line into the air fitting (AP25).
3. Slowly open the ball valve (HV60-34) completely.
4. Adjust the needle valve (NV14Y) to desired wetness or dryness of foam following the steps below:
  - a. Close needle valve completely in clockwise direction.
  - b. Open needle valve in counter-clockwise direction 2 complete turns.
  - c. Continue to open valve in  $\frac{1}{4}$  turn increments allowing 30 seconds between adjustments until proper consistency of foam is achieved.

### After Use Instructions:

1. Flush the unit with fresh water for 5 minutes.
2. Disconnect the air line from the air fitting (AP25) and relieve any remaining pressure in the system by opening the discharge ball valve (HV60-34).
3. Close the ball valve (HV60-34) after all pressure has been relieved from the system.

### Maintenance Instructions:

To keep your portable unit operating properly, periodically perform the following maintenance procedures:

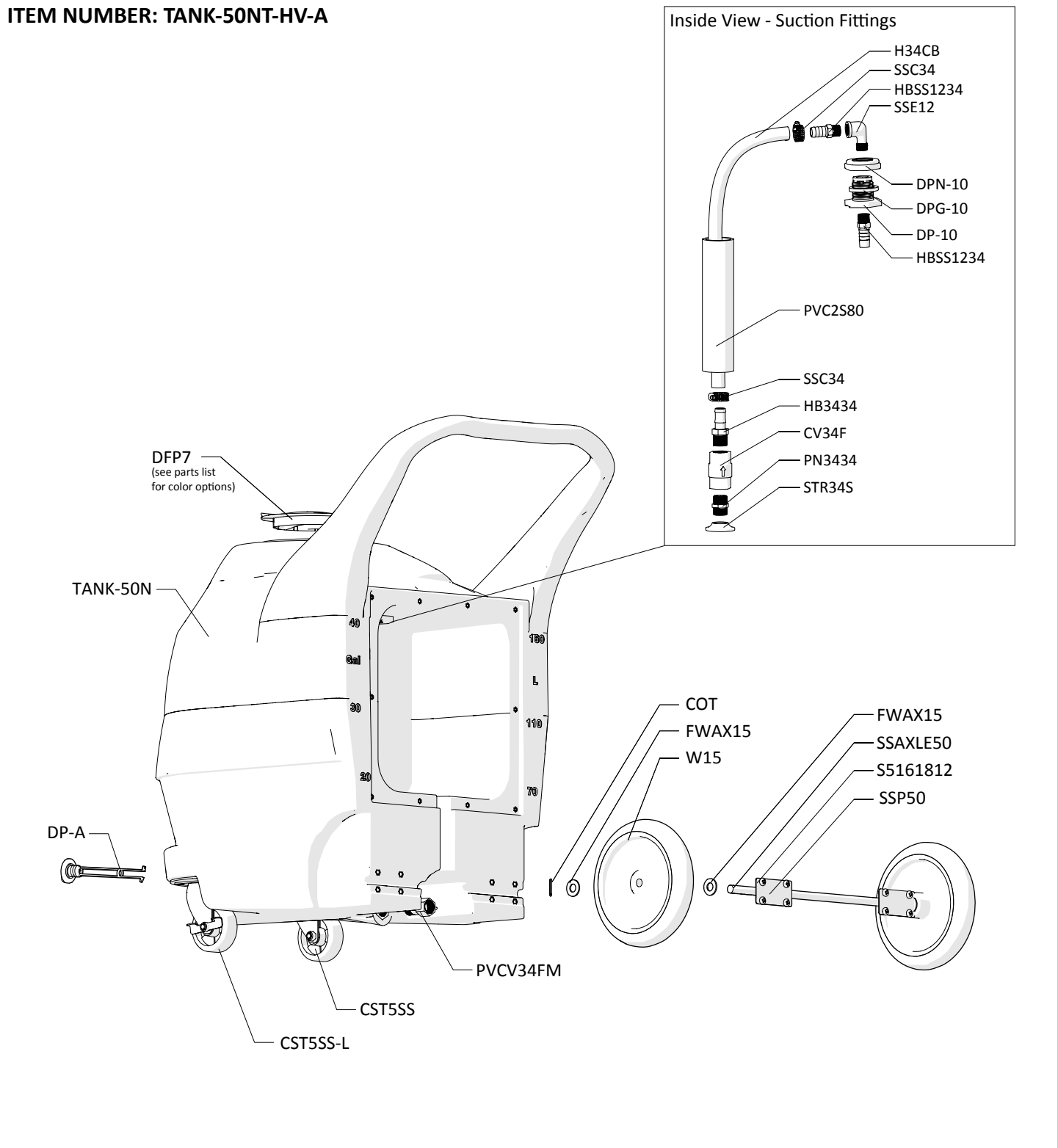
- Check the air pump (GP34T) for wear and leaks.
- Inspect hoses for leaks or excessive wear. Make sure all hose clamps are in good condition and properly secured.
- Check the suction tube and screen for debris and clean as needed.
- Drain compressor tank on a regular basis to ensure proper operation of pump.

### Troubleshooting Instructions:

- Check to ensure the discharge hose is uncoiled properly, and that there are no kinks that could obstruct fluid flow.
- If needle valve (NV14Y) valve is open too far, the pump (GP34T) will cycle improperly due to lack of air pressure. If this occurs, reset needle valve as described in Operation Instruction #4.
- Make sure proper foaming chemical and concentration is being used.
- If foam solution backs up into air regulator (R14), the check valve (CV38) needs to be replaced.
- If foam comes out wet, no matter where the needle valve (NV14Y) is positioned, the check valve (CV38) may need to be replaced.
- Check for proper air pressure on air gauge (AG100). Air regulator (R14) is factory set at 50 psi (3.4 bar). Operating range is 40 to 100 psi (3 to 5 bar) with 12-20 cfm (339.8-566.3 l/min)
- If the unit foams at a reduced pressure:
  - o Check the air compressor supplying the unit. If the pressure is less than 40 psi, turn the foam unit off until the compressor can catch up.
  - o If the air supply is 50 psi (3.4 bar) or above, check the AG100, which should read near 50 psi (3.4 bar). If the AG100 is more or less than 50 psi (3.4 bar), adjust the pressure by turning the knob on the top of the air regulator (R14).
- Check for plugged strainer (STR34S). Replace strainer if necessary. Strainer must be used.

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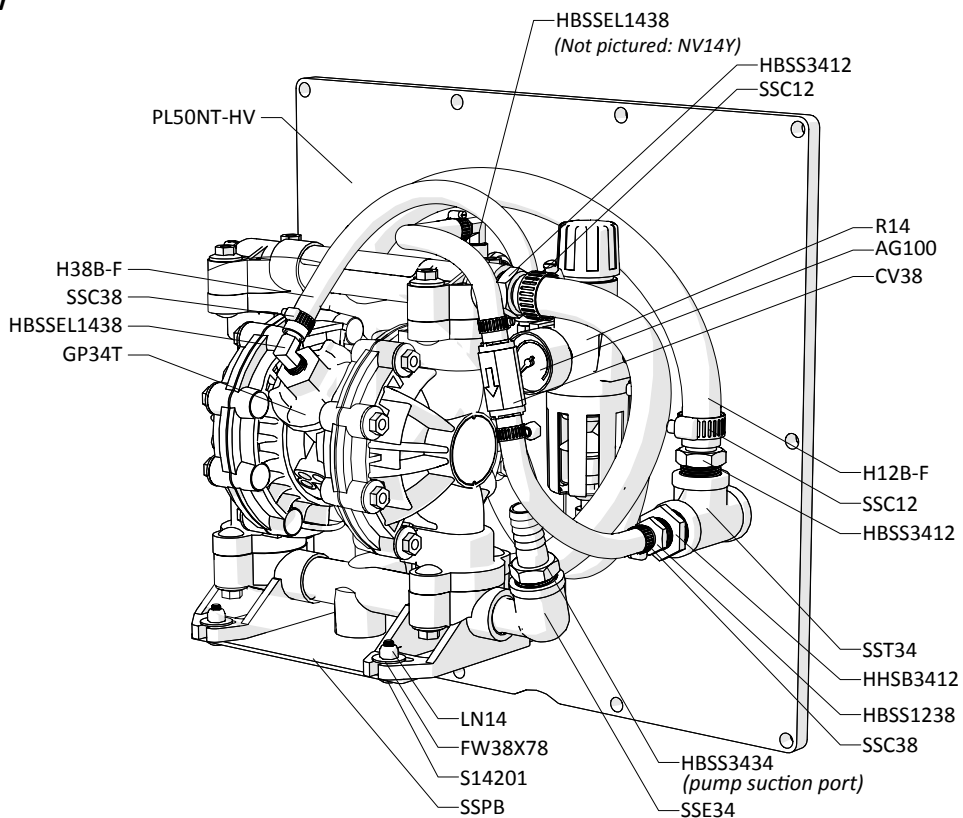
**TANK ASSEMBLY**  
**ITEM NUMBER: TANK-50NT-HV-A**



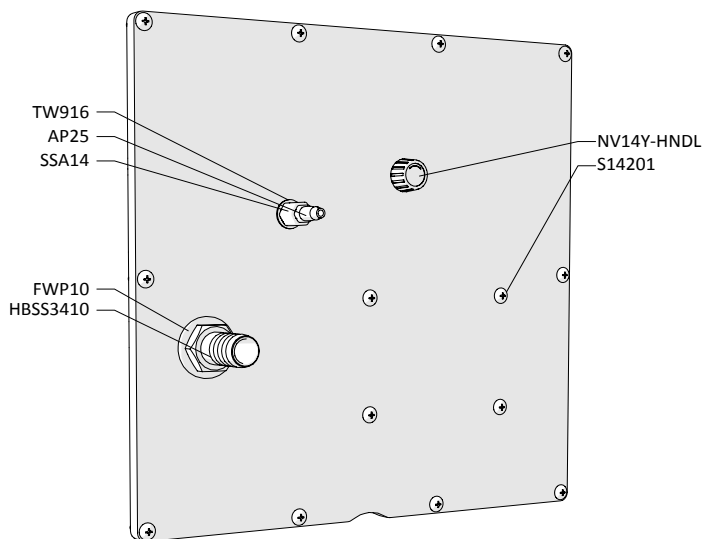
## READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT

### PLATE ASSEMBLY ITEM NUMBER: PA-50NT-HV

#### Plate - Inside View



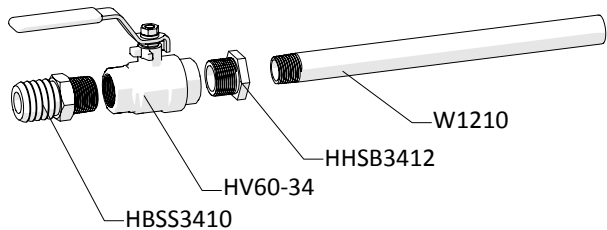
#### Plate - Back View



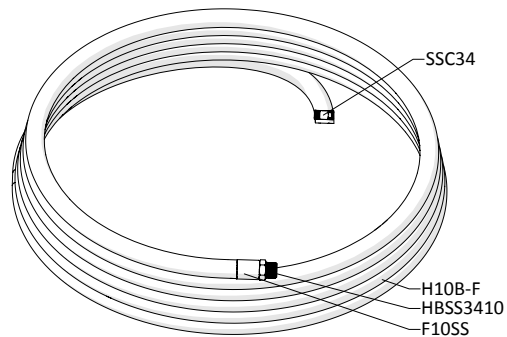
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### HOSE AND WAND ASSEMBLY ITEM NUMBER:

ZERO TIP FOAM WAND ASSEMBLY  
ITEM NUMBER: SSWA34

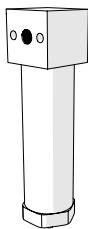


50 ft (15.2 m) HOSE ASSEMBLY  
ITEM NUMBER: H10-50

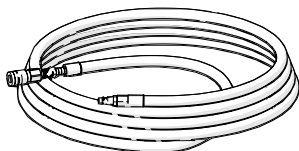


### OPTIONAL COMPONENTS

WATER SEPARATOR  
ITEM NUMBER: WS-20CFM



30 ft (9 m) AIR HOSE ASSEMBLY  
ITEM NUMBER: AH30



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ITEM NUMBER	DESCRIPTION
AG100	1.5 INCH DRY MODEL 20 DUAL SCALE GAUGE
AP25	AIR FITTING 1/4 MPT X PLUG-BRASS
B8X58	8-15 x 1/2 FLAT PHIL TY-A 18-8 PLN
COT	1/8 X 1 COTTER PIN 18-8 S/S
CST5SS	5in S.S. SWIVEL CASTER WITH 4 IN WHEEL
CST5SS-L	5in S.S. SWIVEL CASTER WITH 4 IN WHEEL AND LOCK
CV34F	VA CHECK VALVE-1/3 POUND-302SS SPRING
CV38	PVC CHECK VALVE 3/8 BARBS - SS SPRING
DFF7	"7 INCH HINGED CAP ASSEMBLY - INCLUDES BLACK CAP, LID FLANGE AND HINGE PIN"
<i>DFF7-C</i>	7 INCH FILL CAP POLYETHYLENE BLACK
<i>DFF7-F</i>	7 INCH TANK LID FLANGE POLYETHYLENE
<i>DFF7-PIN</i>	HINGE PIN FOR 7 INCH FILL CAP AND FLANGE
DFF7-C-BL	7 INCH FILL CAP POLYPRO BLUE PANTONE
DFF7-C-GN	7 INCH FILL CAP POLYPRO GREEN PANTONE
DFF7-C-RD	7 INCH FILL CAP POLYPRO RED PANTONE
DFF7-C-YL	7 INCH FILL CAP POLYPRO YELLOW PANTONE
DP-A	DRAIN PLUG ASSEMBLY FOR NATURAL PORTABLE UNITS - INCLUDES PLUG AND GASKET
<i>DP</i>	FRONT DRAIN PLUG FOR PORTABLE UNIT POLYETHYLENE
<i>DP-G</i>	FKM LATHE CUT 60 DUROMETER
DP-10	BULKHEAD BODY 1/2 FPT
DPG-10	BULKHEAD GASKET
DP-INSERT	304 STAINLESS DRAIN PLUG INSERT
DPN-10	BULKHEAD RETAINING NUT
F10SS	STAINLESS FERRULE FOR 1 IN HOSE
FW38X78	FLAT WASHER 3/8X7/8 X.050
FWAX15	FLAT AXLE WASHER
FWP10	1 1/16in BY 2in 8-18 S.S. FLAT WASHER - .125 THICK
FWP14	C-816 1/2in SS WASHER
GP34T	DIAPHRAGM PUMP 3/4in - TEFLON
H10B-F	1 INCH BLUE HOSE-HYBRID TPE-Available per ft.
H12B-F	1/2 INCH BLUE HOSE-HYBRID TPE-Available per ft.
H34CB	3/4in CLEARBRAID RF SERIES
H38B-F	3/8 INCH BLUE HOSE-HYBRID TPE-Available per ft.

HB3434	POLY HOSE BARB 3/4in X 3/4in
HBSS1234	STAINLESS HOSE BARB 1/2 MPT X 3/4 BARB
HBSS1238	STAINLESS HOSE BARB 1/2 MPT X 3/8 BARB
HBSS1438	STAINLESS HOSE BARB 1/4 MPT X 3/8 BARB
HBSS3410	STAINLESS HOSE BARB 3/4 MPT X 1 BARB
HBSS3412	STAINLESS HOSE BARB 3/4 MPT X 1/2 BARB
HBSEL1438	STAINLESS HOSE BARB 1/4 MPT X 3/8 BARB ELBOW
HHBB1418	HEX HEAD BUSHING 1/4 MPT X 1/8 FPT
HHSB3412	HEX HEAD STAINLESS BUSHING 3/4 MPT X 1/2 FPT
HV60-34	3/4IN STAINLESS LOCKING BALL VALVE
LN14	1/4-20 NE NYL INS LOCKNUT 18-8 PLN
NV14Y	FLOW CONTROL VALVE - INCLUDES BLACK KNOB
PN3434	POLY NIPPLE 3/4in MPT X 3/4in MPT
PVC2S80	2in PVC-80 PIPE - GRAY
PVCV34FM	PVC VALVE 3/4in FPT X 3/4in MPT
R14	1/4 NPTF REGULATOR W/ FILTER-NO GAUGE
S14201	1/4 20 Pan Head Screw - 1 inch Stainless
S142058-VS	1/4-20 X 5/8 PHIL TRUSS MACHINE SCREW 18-8 W/#516 VIBRASEAL ORANGE PATCH
S5161812	5/16-18 x 1/2 Phil Pan 18-8
SSA14	STAINLESS ADAPTOR 1/4 MPT X 1/4 FPT
SSAXLE50	SS AXLE .625 DIA X 23.05 IN
SSC12	STAINLESS SCREW BAND CLAMP FOR 1/2 IN HOSE
SSC38	STAINLESS SCREW BAND CLAMP FOR 3/8 IN HOSE
SSE12	STREET ELBOW 1/2in - 316 S.S.
SSE34	3/4IN STREET ELBOW-STAINLESS
SSP50	STAINLESS STEEL AXLE PLATE (50 GAL)
SSP50-CSTR	STAINLESS STEEL PLATE FOR CASTER SUPPORT
SSPB	SS PUMP MTG BRACKETS
SST34	STAINLESS TEE 3/4 FPT
STR34S	STRAINER #663-3, 3/4 MNPT
TANK-50N	ROTO MOLDED 50 GALLON UNIT
TW916	1/2 INT TOOTH L/W 410SS
W1210	SS WAND 1/2 MPT TOE-10 IN LONG
W15	NONMARKING WHEEL FOR PORTABLE UNITS