

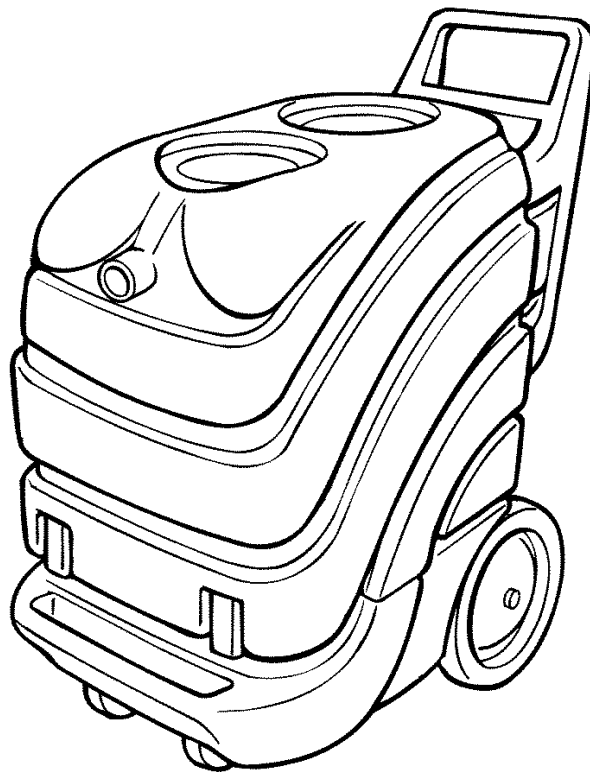


1180

Carpet Extractor with Heat

Model No.:
607677 – 1180
607678 – 1180 Pac

Operator and Parts Manual



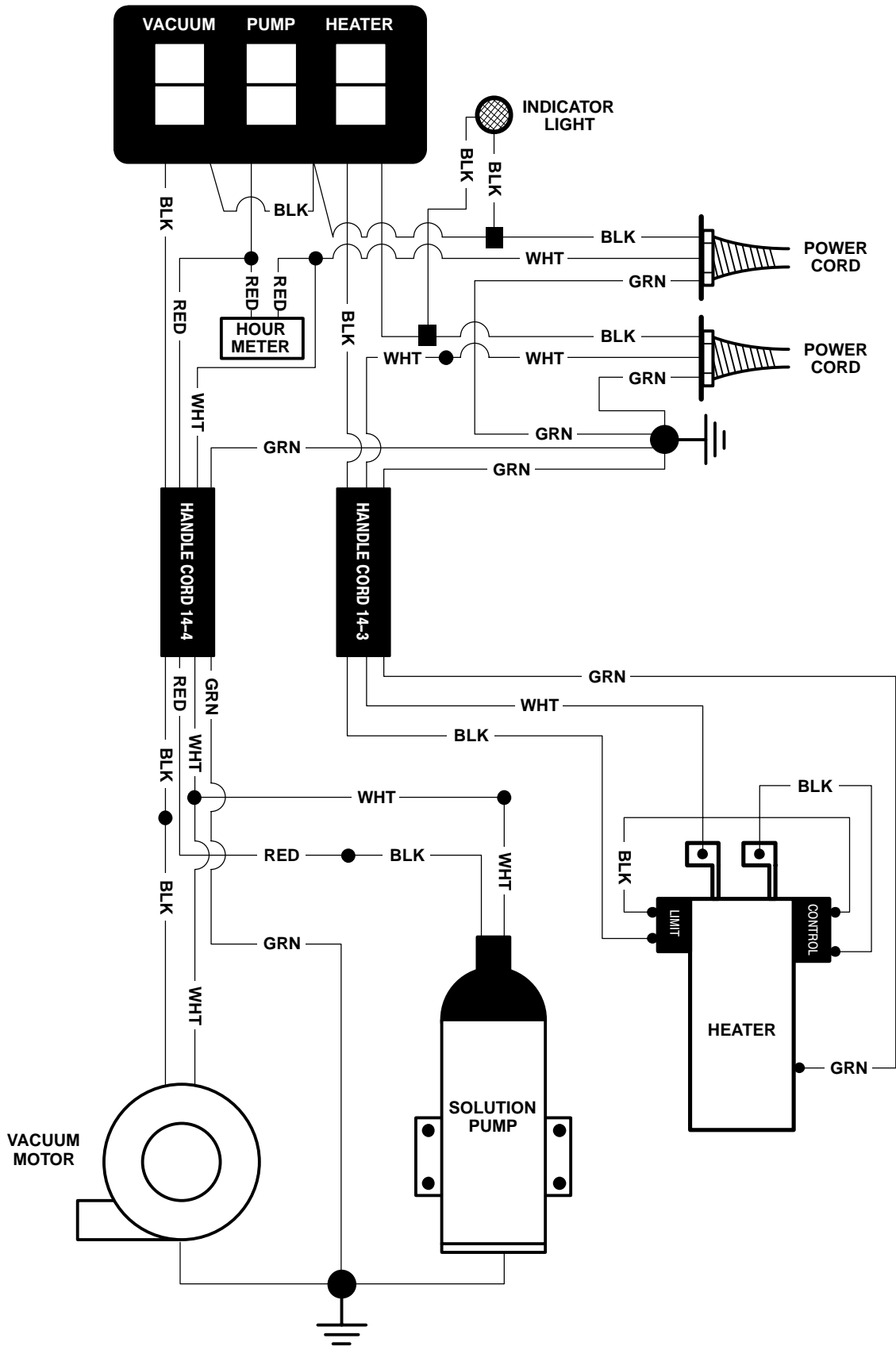
TENNANT COMPANY
Commercial Products
12875 RANSOM STREET
HOLLAND MI 49424 U.S.A.

FAX: 1-800-678-4240
CUSTOMER SERVICE: 1-800-982-7658

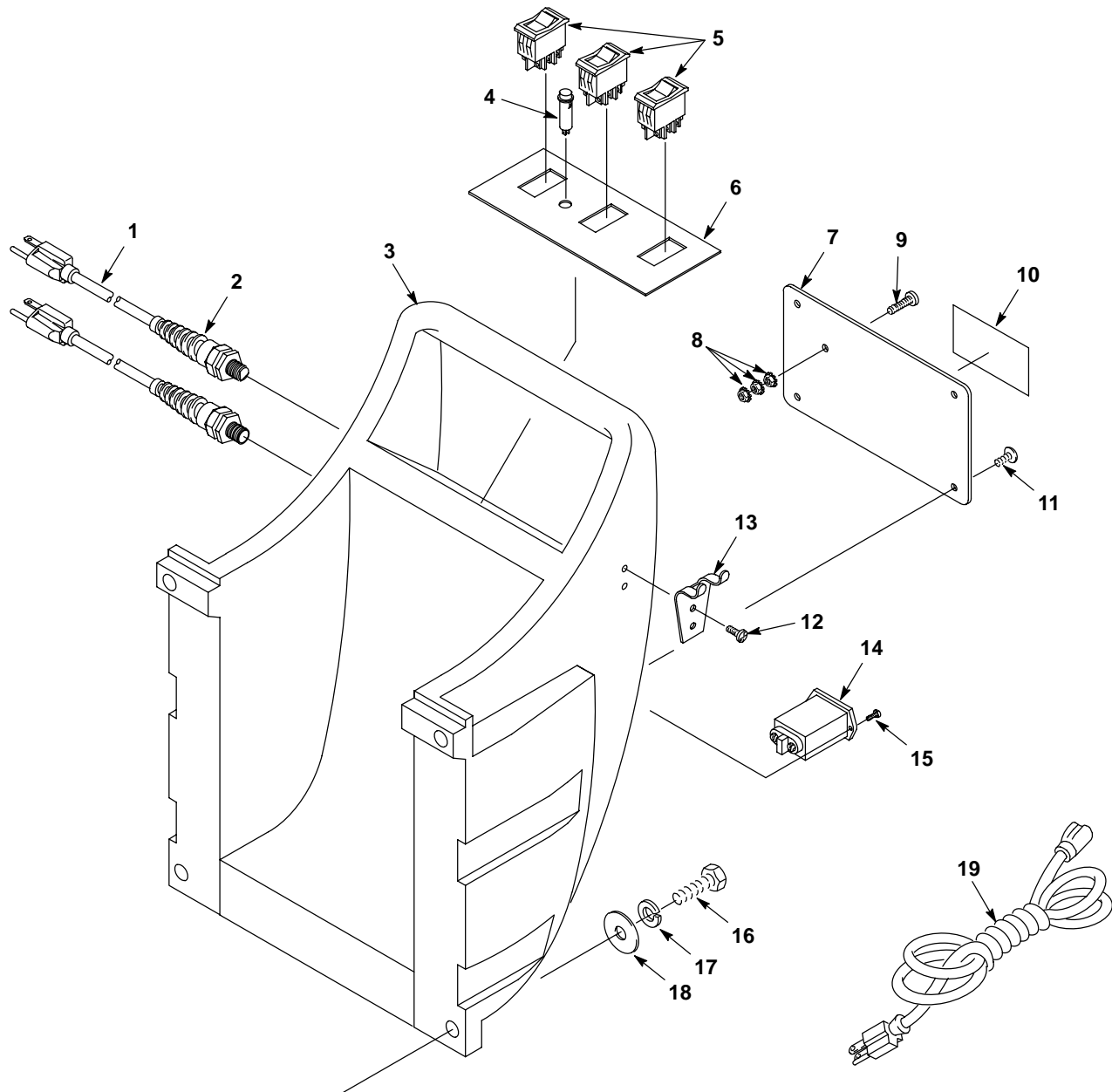
608787
Rev. 00 (11-99)

ELECTRICAL DIAGRAM

120V Wiring



HANDLE GROUP

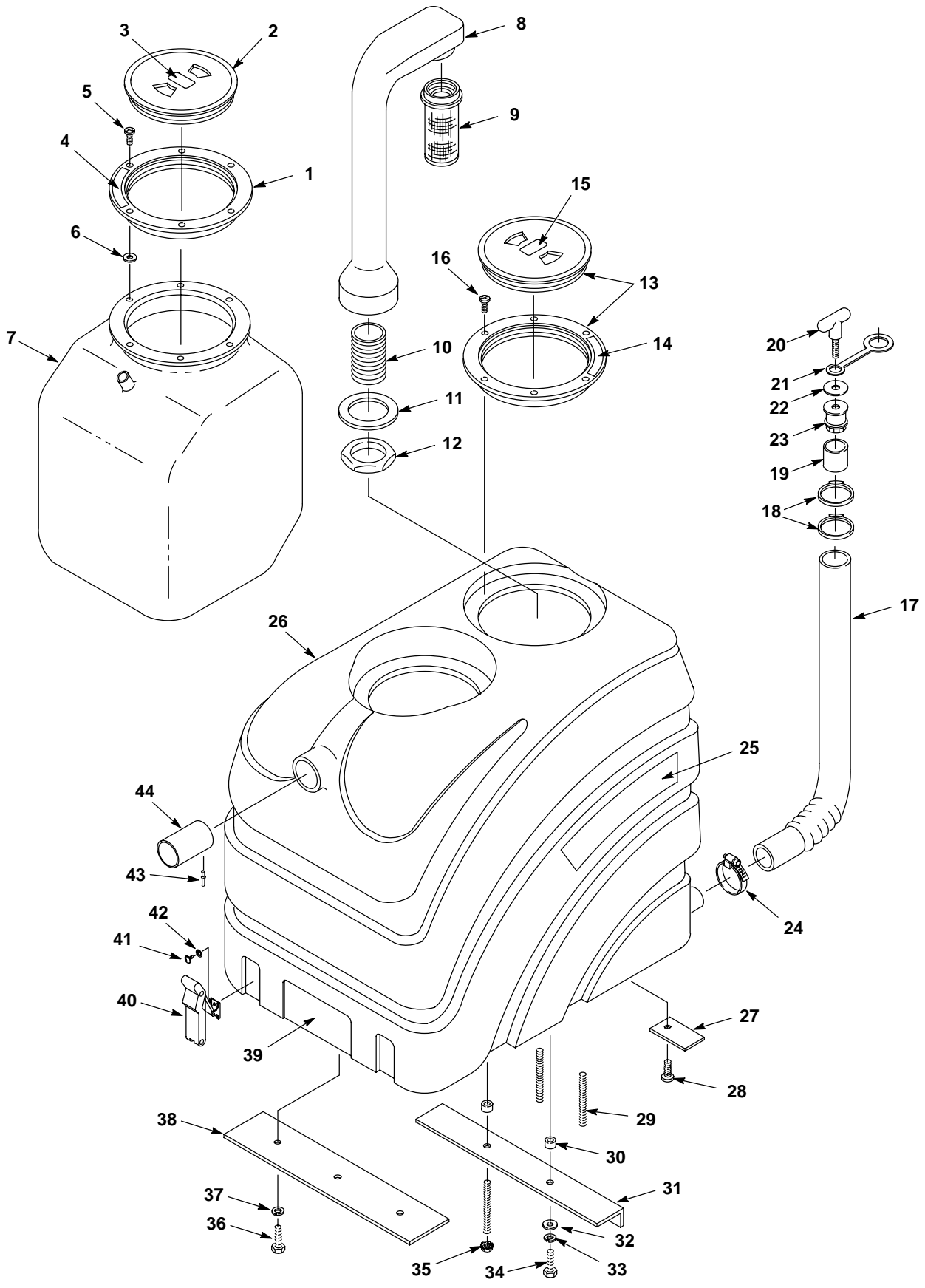


| REF | PART # | DESCRIPTION | QTY. |
|-----|-----------|-----------------------------|------|
| 1 | 130227 | ●CORD, 14/3 X 20" YELLOW | 2 |
| 2 | 130166 | ●CORD GRIP, NYLON/BLK W/NUT | 2 |
| 3 | 607688 | HANDLE, TEAL | 1 |
| 4 | 130691 | ●LIGHT, INDICATOR – GREEN | 1 |
| 5 | 19417 | ●SWITCH, WITH ON/OFF | 3 |
| 6 | 120189 | DECAL, DASH | 1 |
| 7 | 230908.BK | PLATE, REAR COVER BLACK | 1 |
| 8 | 140519 | NUT 10–24 KEP | 3 |
| 9 | 140900 | SCREW 10–24X3/4 TRSPHL | 1 |
| 10 | 120619 | DECAL, WARNING EXTRACTORS | 1 |

| REF | PART # | DESCRIPTION | QTY. |
|-----|-----------|----------------------------|------|
| 11 | 140197 | SCREW 10–24X3/8 TRSPHL | 4 |
| 12 | 140825 | SCREW #6X1/2 PANPHL | 2 |
| 13 | 230696.BK | BRACKET, DRAIN HOSE HANGER | 1 |
| 14 | 130017 | METER, HOUR–RECTANGULAR | 1 |
| 15 | 140825 | SCREW #6X1/2 PANPHL | 2 |
| 16 | 140231 | SCREW, HXHDGP 3/8X1–1/2 | 4 |
| 17 | 140017 | WASHER 3/8 SPLTLCK | 4 |
| 18 | 140028 | WASHER 3/8 FLT | 4 |
| 19 | 130694 | ●CORD, EXT 14/3X25' YELLOW | 1 |

● RECOMMENDED STOCK ITEMS

UPPER HOUSING GROUP



UPPER HOUSING GROUP

| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|-----------------------------|------|
| ▽ | 100103 | CLEAR LID, W/CNTRS NK HOLES | 1 |
| ▲1 | 100109 | LID OUTER RING | 1 |
| ▲2 | 100105 | ● LID, CENTER ONLY CLEAR | 1 |
| 3 | 120190 | DECAL, "USE BLEEDER HOSE" | 1 |
| 4 | 120907 | DECAL, "IMPORTANT..." | 1 |
| 5 | 140900 | SCREW, 10-24X3/4 TRSPHL | 6 |
| 6 | 140000 | WASHER, 1/4 FLT | 6 |
| 7 | 602783 | BLADDER | 1 |
| 8 | 602448 | STANDPIPE W/NIPPLE | 1 |
| 9 | 180613 | ● FLOAT, SHUT-OFF | 1 |
| 10 | 606088 | FITTING 1-1/2" NIPPLE | 1 |
| 11 | 101714 | GASKET, WASTE AIR CHAMBER | 1 |
| 12 | 210240 | NUT, FLANGED METAL 1-1/2 | 1 |
| 13 | 100102 | ● CLEAR LID W/STANDARD HOLE | 1 |
| 14 | 120907 | DECAL, IMPORTANT-ALWAYS... | 1 |
| 15 | 120906 | DECAL, IMPORTANT-DRAIN... | 1 |
| 16 | 140825 | SCREW, #6X1/2 PANPHL | 6 |
| ▽ | 590965 | KIT, DRAIN HOSE COMPLETE | 1 |
| ▲17 | 160627 | HOSE, DRAIN | 1 |
| ▲18 | 140072 | CLAMP, 1 9/16 STEPLESS | 2 |
| ▲19 | 140921 | SLEEVE, DRAIN HOSE | 1 |
| ▽▲ | 501061 | ● ASM DRAINHOSE STOPPER | 1 |
| ▲20 | 230831 | KNOB, DRAIN HOSE | 1 |
| ▲21 | 230882 | STRAP, DRAIN STOPPER | 1 |

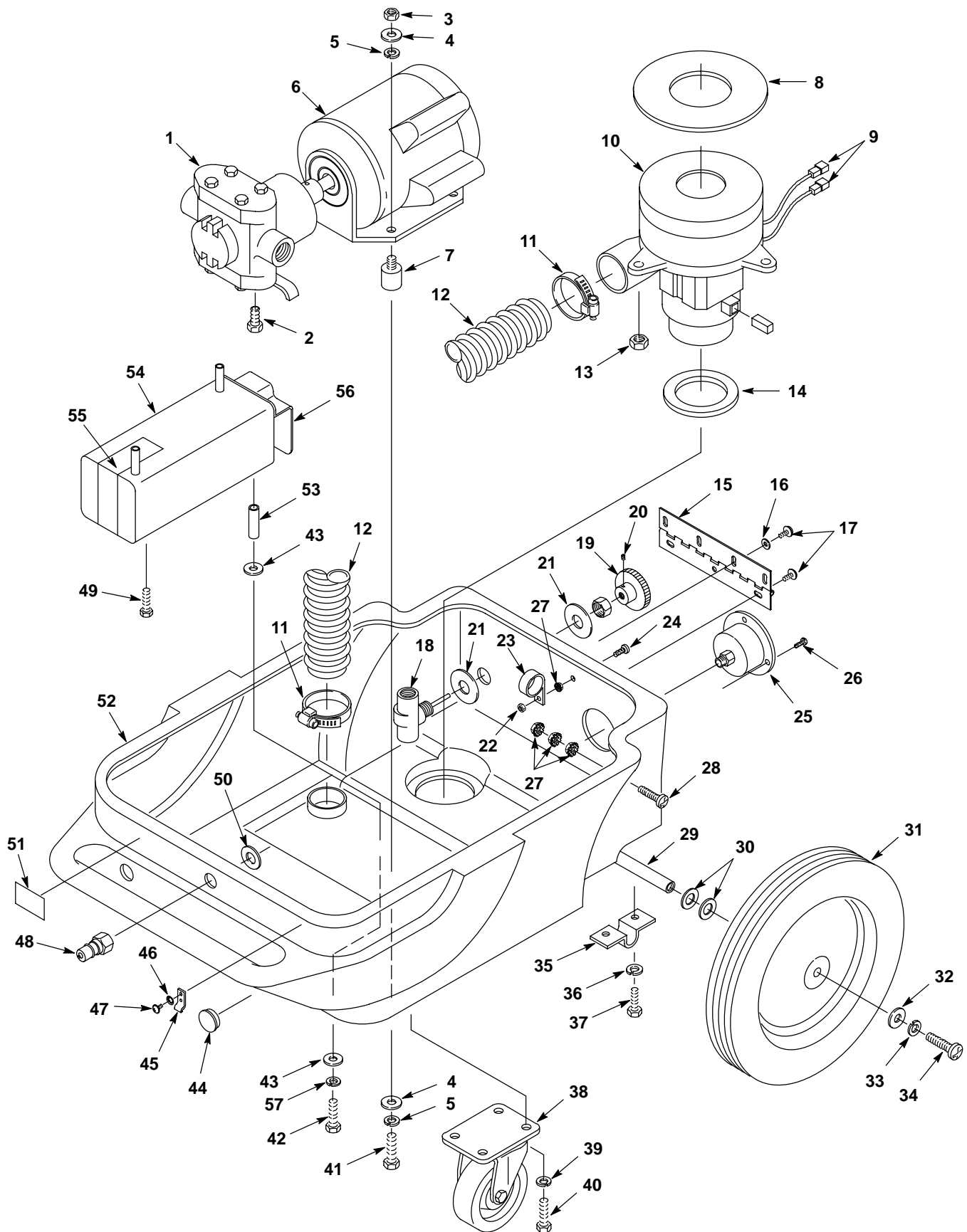
| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|-------------------------------|------|
| ▲22 | 140056 | WASHER 3/8IDX1.50OD FNDR | 1 |
| ▲23 | 140955 | PLUG, DRAIN HOSE | 1 |
| 24 | 140307 | CLAMP, HOSE 3/4 TO 1-3/4 | 1 |
| 25 | 608112 | DECAL, 1180 | 2 |
| 26 | 607686 | TANK, RECOVERY, TEAL | 1 |
| 27 | 230845 | PLATE, CORD CLAMP | 1 |
| 28 | 140834 | SCREW 1/4-20X5/8 FLTPHL | 1 |
| 29 | 140258 | SCREW 1/4-20X4-1/4 STUD | 3 |
| 30 | 140134 | BUSHING .375ODX.250IDX.270THK | 2 |
| 31 | 230846 | BRACKET, TANK SUPPORT | 1 |
| 32 | 140000 | WASHER 1/4 FLT | 1 |
| 33 | 140016 | WASHER 1/4 LCK | 1 |
| 34 | 140554 | SCREW 1/4-20X3/4 HXHDCP | 1 |
| 35 | 140524 | NUT 1/4-20 KEP | 1 |
| 36 | 140259 | SCREW 1/4-20X5/8 HXHDCP | 3 |
| 37 | 140016 | WASHER 1/4 LCK | 3 |
| 38 | 230946 | BRACKET, TANK BRACE FRONT | 1 |
| 39 | 120210 | DECAL, "TENNANT" LOGO | 1 |
| 40 | 140932 | ● LATCH, HOOD W/ KEEPER | 2 |
| 41 | 140801 | SCREW 8-32X3/8 TRSPHL | 4 |
| 42 | 140023 | WASHER #8 INT | 4 |
| 43 | 140703 | RIVET, POP 3/16 X .251-.375 | 1 |
| 44 | 230905 | TUBE, INLET | 1 |

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

LOWER HOUSING GROUP



LOWER HOUSING GROUP

| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|---------------------------------|------|
| 1 | 180100 | PUMP, TWIN PISTON | 1 |
| 2 | 140823 | SCREW 10-24X5/8 TRSPHL | 2 |
| 3 | 140506 | NUT 5/16-18 HEX | 4 |
| 4 | 140027 | WASHER 5/16 FLT | 8 |
| 5 | 140015 | WASHER 5/16 SPLTLCK | 8 |
| 6 | 130450 | MOTOR, PUMP DRIVE 1/3 HP (120V) | 1 |
| | 130453 | MOTOR, PUMP DRIVE (230V) | 1 |
| 7 | 130031 | MOUNT, MOTOR 1-1/4" | 4 |
| 8 | 100001 | ●GASKET VAC MOTOR 7.2 | 1 |
| 9 | 130096 | TERMINAL, ML DSCNT | 2 |
| ∇10 | 130404 | ●MOTOR, VAC 7.2/3 STAGE (120V) | 1 |
| ▲ | 190157 | ●BRUSH,CARBON 2/PK | 2 |
| ∇ | 130405 | MOTOR, VAC 7.2/3 STAGE (230V) | 1 |
| ▲ | 190157 | BRUSH,CARBON 2/PK | 2 |
| 11 | 140308 | CLAMP, HOSE 1-5/16 TO 2-1/4 | 2 |
| 12 | 160629 | ●HOSE 2" X 28" WHITE | 1 |
| 13 | 140501 | NUT 1/4-20 NYLK | 3 |
| 14 | 102567 | ●GASKET, VAC MOTOR INTAKE | 1 |
| 15 | 230390 | HINGE, TANK | 1 |
| 16 | 140000 | WASHER 1/4 FLT | 4 |
| 17 | 140885 | SCREW 1/4-20X1/2 TRSPHL | 7 |
| ∇18 | 210108 | VALVE, PRESSURE CONTROL | 1 |
| ▲19 | 210023 | KNOB, NEEDLE VALVE | 1 |
| 20 | 140894 | SCREW, SCST CPPT 10-32X1/4 | 1 |
| 21 | 27820 | WASHER, FLAT .687 ID X 1.50 OD | 2 |
| 22 | 140552 | NUT 10-24 NYLCK | 1 |
| 23 | 140328 | CLAMP, 3/8" NYLON | 1 |
| 24 | 140196 | SCREW 10-24X1 TRSPHL | 1 |
| 25 | 606659 | GAUGE,PRESSURE 0-600 PSI | 1 |
| 26 | 140825 | SCREW #6X1/2 PANPHL | 3 |
| 27 | 140519 | NUT 10-24 KEP | 4 |

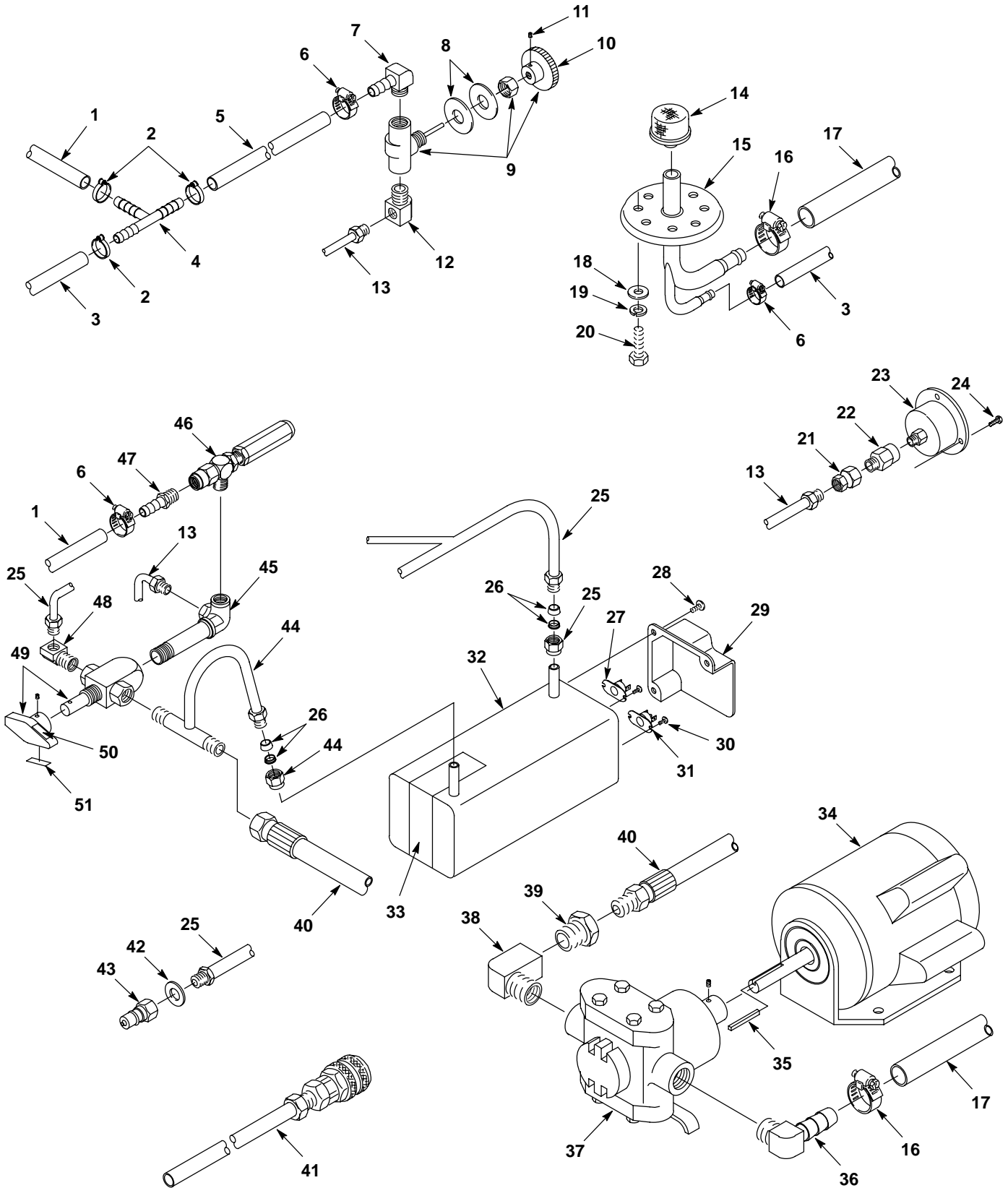
| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|--------------------------------|------|
| 28 | 140196 | SCREW 10-24X1 TRSPHL | 1 |
| 29 | 230907 | AXLE, 18" | 1 |
| 30 | 140008 | WASHER 1/2 FLT | 4 |
| 31 | 103009 | ●WHEEL, 12" X 1.75 WHITE/GRAY | 2 |
| 32 | 140000 | WASHER 1/4 FLT | 2 |
| 33 | 140016 | WASHER 1/4 LCK | 2 |
| 34 | 140885 | SCREW 1/4-20X1/2 TRSPHL | 2 |
| 35 | 230746 | BRACKET AXLE OFFSET | 2 |
| 36 | 140016 | WASHER 1/4 LCK | 4 |
| 37 | 140259 | SCREW 1/4-20X5/8 HXHDCP | 4 |
| 38 | 103065 | ●CASTER, SWIVEL 4" | 2 |
| 39 | 140016 | WASHER 1/4 LCK | 8 |
| 40 | 140259 | SCREW 1/4-20X5/8 HXHDCP | 8 |
| 41 | 140223 | SCREW 5/16-18X3/4 HXHDCP | 4 |
| 42 | 140869 | SCREW 10-24X1-3/4 PANPHL | 2 |
| 43 | 140011 | WASHER 3/16 FLT | 4 |
| 44 | 130284 | PLUG, DOME 1.00" BLACK | 1 |
| 45 | 140932 | KEEPER (PART OF LATCH) | 2 |
| 46 | 140023 | WASHER #8 INT | 4 |
| 47 | 140801 | SCREW 8-32X3/8 TRSPHL | 4 |
| 48 | 150933 | FITTING 1/4F QD PLUG BRS SER60 | 1 |
| 49 | 140823 | SCREW 10-24X5/8 TRSPHL | 2 |
| 50 | 140058 | WASHER .543X.875X.062 WAND | 1 |
| 51 | 120123 | DECAL, CAUTION PRESSURE | 1 |
| 52 | 607683 | CHASSIS, TEAL | 1 |
| 53 | 140918 | SPACER .20X.31X1.00 | 2 |
| ∇54 | 180440 | HEATER, 1700W (120V) COMPLETE | 1 |
| | 180441 | HEATER 1700W (230V) COMPLETE | 1 |
| ▲ | 102566 | INSULATOR, HEATER | 1 |
| 55 | 102568 | STRAP, NYLON W/ ADHESIVE | 1 |
| 56 | 101288 | COVER HEATER | 1 |

∇ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

PLUMBING GROUP



PLUMBING GROUP

| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|---------------------------------|------|
| 1 | 606359 | HOSE 1/4ID X 8" GRAY L.P. | 1 |
| 2 | 140325 | CLAMP, EAR 1/2" | 3 |
| 3 | 606161 | HOSE 1/4 X 36" GRAY L.P. | 1 |
| 4 | 150713 | TEE, UNION 1/4" BARB NYLON | 1 |
| 5 | 606244 | HOSE 1/4IDX16" LP | 1 |
| 6 | 140305 | CLAMP, HOSE 7/32-5/8 DIAM | 3 |
| 7 | 150418 | FITTING, 1/4MX1/4H ELBOW 90 BRS | 1 |
| 8 | 27820 | WASHER, FLAT .687 ID X 1.50 OD | 2 |
| ∇9 | 210108 | ●VALVE, PRESS CNTRL W/NUT | 1 |
| ▲10 | 210023 | ●KNOB, NEEDLE VALVE | 1 |
| ▲11 | 140894 | ●SCREW, SCST CPPT 10-32X1/4 | 1 |
| 12 | 606987 | FITTING, 1/4"NPTM X 1/4"INV.FL | 1 |
| 13 | 606666 | ASM PRESSURE GAUGE TUBE | 1 |
| 14 | 603186 | ●SCREEN CLEAN WATER TANK | 1 |
| 15 | 600452 | PLATE BLADDER ASM | 1 |
| 16 | 140310 | CLAMP, HOSE 5/16-7/8 | 2 |
| 17 | 603051 | HOSE, 29"LONG REINFORCED | 1 |
| 18 | 140000 | WASHER 1/4 FLT | 4 |
| 19 | 140016 | WASHER 1/4 LCK | 4 |
| 20 | 140259 | SCREW 1/4-20X5/8 HXHDCP | 4 |
| 21 | 606665 | FITTING, GAUGE ADAPTER | 1 |
| 22 | 606660 | ●FITTING, GAUGE SNUBBER | 1 |
| 23 | 606659 | ●GAUGE, PRESSURE 0-600 PSI | 1 |
| 24 | 140825 | SCREW #6X1/2 PANPHL | 3 |
| 25 | 606663 | HEATER OUTLET TUBE W/NUT | 1 |
| 26 | 600546 | FERRULE S/S FOR #600545 | 2 |
| 27 | 130692 | CONTROL, THERMOSTAT | 1 |

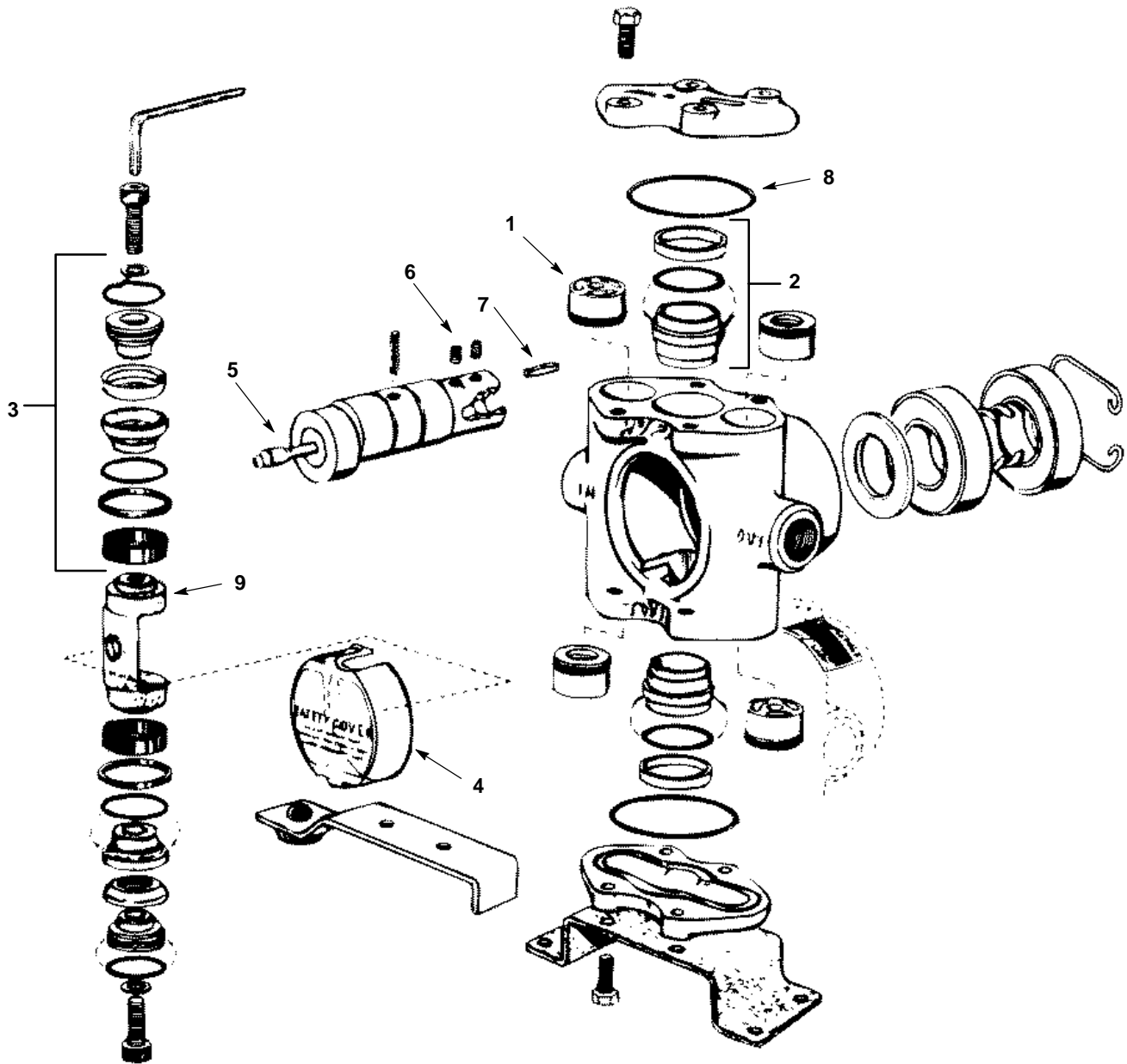
| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|--------------------------------|------|
| 28 | 140197 | SCREW 10-24X3/8 TRSPHL | 2 |
| 29 | 101288 | COVER HEATER | 1 |
| 30 | 6032.6 | SCREW 8-32X3/8 PANPHL | 4 |
| 31 | 130693 | LIMIT, THERMOSTAT | 1 |
| ∇32 | 180440 | ●HEATER, 1700W (120V) CMPLT | 1 |
| | 180441 | HEATER, 1700W (230V) COMPLETE | 1 |
| ▲ | 102566 | INSULATOR, HEATER | 1 |
| 33 | 102568 | STRAP, NYLON W/ ADHESIVE | 1 |
| 34 | 130450 | ●MOTOR, PUMP DRIVE (120V) | 1 |
| | 130453 | MOTOR, PUMP DRIVE (230V) | 1 |
| 35 | 190310 | ●PUMP, SHAFT KEY 5300 SERIES | 1 |
| 36 | 150431 | FITTING 1/2MX1/2H ELBOW 90 | 1 |
| 37 | 180100 | ●PUMP, TWIN PISTON | 1 |
| 38 | 150405 | FITTING 1/2MX1/2F ELB STRT90 | 1 |
| 39 | 150101 | FITTING 1/2MX1/4F BUSHING | 1 |
| 40 | 160140 | ●HOSE, PULSE 36" | 1 |
| 41 | 700141 | ●HOSE BLEEDER SERIES 60 | 1 |
| 42 | 140058 | WASHER .543X.875X.062 WAND | 1 |
| 43 | 150933 | ●FITTING 1/4F QD PLUG SER60 | 1 |
| 44 | 606664 | HEATER INLET TUBE W/NUT | 1 |
| 45 | 606662 | MANIFOLD, PRESSURE RELIEF | 1 |
| 46 | 210211 | VALVE, PRESSURE RELIEF | 1 |
| 47 | 150525 | FITTING 1/8MX1/4H BARB | 1 |
| 48 | 606987 | FITTING, 1/4"NPTM X 1/4"INV.FL | 1 |
| 49 | 210043 | ●VALVE, BALL 3-WAY 1/4" BRASS | 1 |
| 50 | 120198 | DECAL, CLEAN - VALVE KNOB | 1 |
| 51 | 120199 | DECAL, PREHEAT - VALVE KNOB | 1 |

∇ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

SOLUTION PUMP GROUP

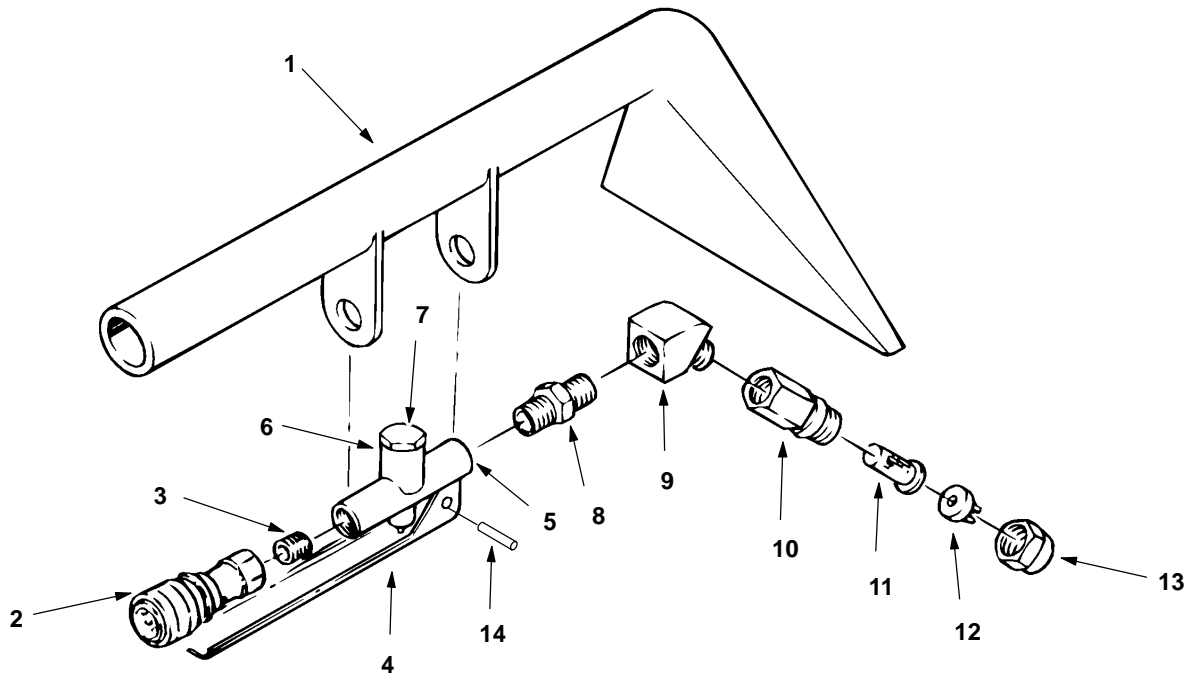


| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|------------------------------|------|
| | 180100 | PUMP, TWIN PISTON (COMPLETE) | 1 |
| 1 | 190301 | ●VALVE KIT, SET OF 4 | 1 |
| 2 | 190302 | ●KIT, CYLINDER SLEEVE | 1 |
| 3 | 190300 | ●CUP KIT, SET OF 2 | 1 |
| 4 | 190307 | SAFETY COVER | 1 |
| 5 | 190305 | GREASE FITTING | 1 |
| 6 | 190309 | SET SCREWS, PUMP | 2 |

| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|-----------------------------------|------|
| 7 | 190310 | ●SHAFT KEY | 1 |
| 8 | 190303 | ●KIT, O-RING (INCLUDES 2 O-RINGS) | 1 |
| 9 | 190304 | CONNECTING ROD | 1 |
| N/S | 190316 | ●PULLER, VALVE SPRING RETAINER | 1 |
| N/S | 190317 | ●PULLER, VALVE, POPPET SEAT | 1 |
| N/S | 190022 | ●GUN, GREASE (METAL) | 1 |

N/S= NOT SHOWN

127 mm (5 in) UPHOLSTERY TOOL ASSEMBLY



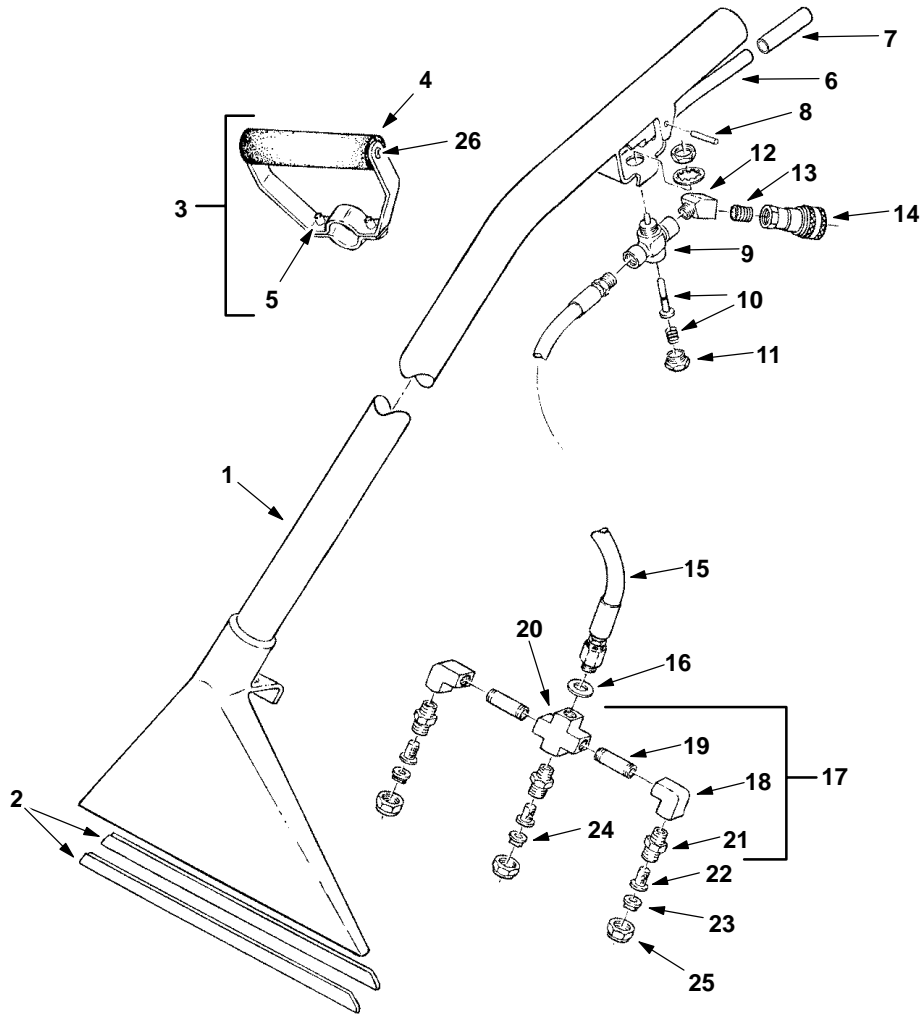
| REF | PART # | DESCRIPTION | QTY. |
|-----|-----------|--------------------------------|------|
| | 200505 | TOOL, 5" HAND (COMPLETE) | 1 |
| 1 | 200431.BK | TOOL, 5" HAND | 1 |
| 2 | 150913 | COUPLER, QUICK, SER. 60 | 1 |
| 3 | 150615 | NIPPLE, CLOSE | 1 |
| 4 | 200905 | LEVER, K-VALVE W/PIN | 1 |
| 5 | 210210 | VALVE, FLOW CONTROL | 1 |
| 6 | 190600 | VALVE PIN & SPRING (NOT SHOWN) | 1 |
| 7 | 210148 | CAP, HEX, VALVE | 1 |

| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|-----------------------|------|
| 8 | 150606 | NIPPLE, HEX 1/4" | 1 |
| 9 | 150403 | ELBOW, ST 1/4" 45° | 1 |
| 10 | 200992 | BODY, SPRAY 1/4"F | 1 |
| 11 | 200996 | SCREEN, SPRAY BODY | 1 |
| 12 | 200965 | TIP, BRASS #8002 | 1 |
| 13 | 200994 | CAP, SPRAY BODY | 1 |
| 14 | 140609 | PIN, ROLL 3/16 X 9/16 | 1 |

N/S NOT SHOWN

OPTIONAL ACCESSORIES

HIGH PRESSURE FLOOR TOOL ASSEMBLY



| REF | PART # | DESCRIPTION | QTY. |
|-----|-----------|----------------------------|------|
| | 600049 | TOOL, 13" FLOOR (COMPLETE) | 1 |
| 1 | 200403.BK | TOOL, 13" FLOOR | 1 |
| 2 | 200939 | SHOES, FLOOR TOOL | 2 |
| 3 | 200927 | GRIP, ADJUSTABLE COMPLETE | 1 |
| 4 | 200912 | FOAM, GRIP | 1 |
| 5 | 140259 | SCREW, 1/4 X 5/8 | 2 |
| 6 | 200902 | TRIGGER, FLOOR TOOL | 1 |
| 7 | 200809 | SLEEVE, TRIGGER | 1 |
| 8 | 140605 | PIN | 1 |
| | 140520 | NUT, PUSH | 2 |
| 9 | 210150 | VALVE, FLOW CONTROL | 1 |
| 10 | 190603 | KIT, VALVE PIN & SPRING | 1 |
| 11 | N/A | CAP, HEX, VALVE | 1 |
| 12 | 150403 | ELBOW, 1/4-45° | 1 |
| 13 | 150615 | NIPPLE, CLOSE 1/4 | 1 |

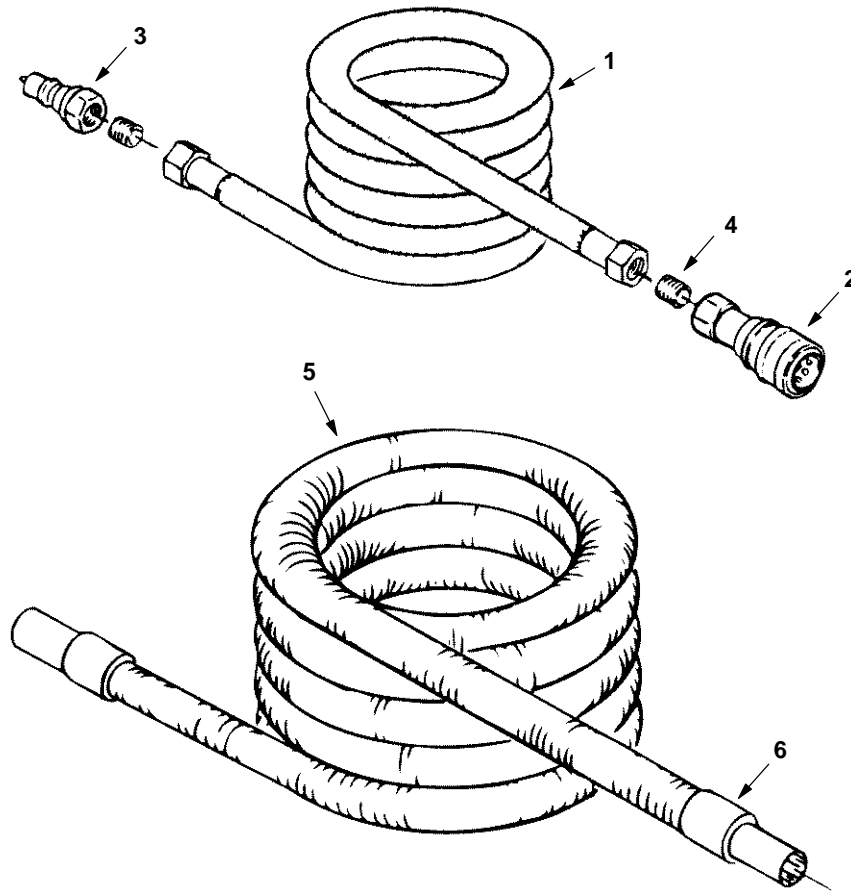
| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|------------------------|------|
| 14 | 150913 | COUPLER, QUICK SER. 60 | 1 |
| 15 | 160175 | HOSE, SOLUTION HP | 1 |
| 16 | 140058 | WASHER | 1 |
| ▽17 | 700062 | ASM., SPRAY BAR | 1 |
| ▲18 | 150401 | ELBOW, 90° 1/4F X 1/4F | 2 |
| ▲19 | 150600 | NIPPLE | 2 |
| ▲20 | 150700 | CROSS | 1 |
| ▲21 | 200993 | SPRAY BODY | 3 |
| 22 | 200996 | SCREEN, SPRAY BODY | 3 |
| 23 | 200986 | TIP, SPRAY (#9502) | 2 |
| 24 | 200988 | TIP, SPRAY (#11002) | 1 |
| 25 | 200994 | CAP, SPRAY BODY | 3 |
| 26 | 140834 | SCREW, 1/4-20 X 5/8 | 2 |
| N/S | 120845 | DECAL, "HIGH PRESSURE" | 1 |

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

N/S NOT SHOWN

SOLUTION AND VACUUM HOSES



| REF | PART # | DESCRIPTION | QTY. |
|-----|--------|----------------------------|------|
| ▽1 | 160191 | SOLUTION HOSE 25' | 1 |
| ▲2 | 150913 | COUPLER, QUICK SER. 60 | 1 |
| ▲3 | 150933 | PLUG, QUICK COUPLER | 1 |
| ▲4 | 150615 | NIPPLE | 2 |
| ▽5 | 160401 | HOSE, VACUUM W/ CUFFS 25' | 1 |
| ▲6 | 160430 | CUFF, HOSE 1-1/2" | 2 |
| N/S | 160451 | CONNECTOR, VAC HOSE 1-1/2" | 1 |

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

N/S NOT SHOWN