## © Tornado

## Illustrated Parts List

For Commercial Use Only


Midrange Floorkeeper

MODEL NOS.<br>99307 \& 99407

TABLE 1

| CATALOG NO. | $\mathbf{9 9 3 0 7}$ | $\mathbf{9 9 4 0 7}$ |
| :--- | :---: | :---: |
| SERIES | S | S |
| VOLTS (Charger) | 36 V | 36 V |
| SIZE | $26^{\prime \prime}$ | $33^{\prime \prime}$ |
| FREQUENCY | 60 | 60 |

## ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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## Tornado ${ }^{\circledR}$ Standard Warranty Program*

$$
\begin{gathered}
10 \text { Years: } \\
\text { All plastic tanks and } \\
\text { rotationally-molded bodies }
\end{gathered} \left\lvert\, \begin{gathered}
2 \text { Years: } \\
\begin{array}{c}
\text { Parts on all Tornado and Tornado/Karcher } \\
\text { cleaning equipment }{ }^{1)}
\end{array}{ }^{2)} \\
1 \text { Year: } \\
\text { Labor on all Tornado and Tornado/Karcher } \\
\text { cleaning equipment }{ }^{1{ }^{2)}}
\end{gathered}\right.
$$

1 Year:
Warranty on batteries, one full year,
Not pro-rated.

[^0]PANEL \& COVER


## PANELS \& COVERS

| ITEM | QTY PART NUMBER |  | DESCRIPTION |
| :---: | :---: | :---: | :---: |
| 1 | 8 | 01497 | NUT-FINISHED HEX 1/4-20 |
| 2 | 8 | 01574 | WASHER - LOCK 1/4* |
| 3 | 8 | 01575 | WASHER-PLAIN \#6 |
| 4 | 6 | 01978 | SCREW-PHILLIPS ROUND HEAD MACHINE $1 / 4-20 \times 1-1 / 2$ |
| 5 | 2 | 02217 | NUT-HEX JAM LOCK (NYLON INSERT) 1/4-20 |
| 6 | 4 | 05270 | NUT-FINISHED HEX \#10-32 |
| 7 | 8 | 05443 | RIVET-SEMI TUBE $7 / 64 \times 5 / 32$ |
| 8 | 4 | 07870 | WASHER-LOCK(1/T)1/4* |
| 9 | 4 | 10003 | GRIP |
| 10 | 2 | 10299 | BRACKET |
| 11 | 28 | 10353 | SCREW-SLOTTED TRUSS HEAD MACHINE 1/4-20 $\times 1 / 2$ |
| 12 | 9 | 10894 | NUT-HEX.LOCK(P/T) |
| 13 | 4 | 11219 | WASHER-PLAIN \#10 |
| 14 | 2 | 12896 | SCREW-PHILLIPS ROUND HEAD MACHINE $110-32 \times 5 / 8$ |
| 15 | 22 | 13611 | NUT-CLIP ON 1/4-20 |
| 16 | 2 | 14142 | WASHER-PLAIN . 265 |
| 17 | 1 | 15416 | CROSSBAR |
| 18 | 1 | 15417 | HINGE |
| 19 | 2 | 15418 | STAND-OFF |
| 20 | 1 | 15431 | COVER, BAITERY |
| 21 | 1 | 15433 | SHIELD |
| 22 | 1 | 15450 | UPPER SIDE PANEL. RH |
| 23 | 1 | 15451 | UPPER SIDE PANEL, LH |
| 24 | 2 | 15459 | GUARD PLASTIC |
| 25 | 4 | 15621 | SCREW-HEX HEAD MACHINE $110-24 \times 5 / 8$ |
| 26 | 2 | 16129 | NUT-FINISHED HEX |
| 27 | 1 | 16276 | TOP COVER ASSEMBLY |
| 28 | 2 | 16470 | BUMPER PAD |
| 29 | 1 | 17273 | BRACKET-HOSE |
| 30 | 5 | 18339 | SCREW-PHILLIPS FLAT HEAD MACHINE $10-24 \times 3 / 4$ |
| 31 | . 5 | 18820 | WASHER FINISHING (NYLON) \#10 |
| 32 | 1 | 19902 | COVER-FRONT |
| 33 | 1 | 19903 | PANEL SIDE RH |
| 34 | 1 | 19904 | PANEL SIDE - LH |
| 35 | 1 | 30447 | LOWER REAR PANEL |
| 36 | 1 | 30899 | UPPER BAITERY BRACKET |
| 37 | 1 | 30907 | BRACKET-BATTERY |
| 38 | 2 | 30818 | DECAL "TORNADO W/ LOGO" |
| 39 | 1 | 30843 | DECAL FRONT "MR 26 " |
|  | 1 | 30842 | DECAL FRONT "MR 33" |
| 40 | 2 | 13022 | PAD |
| 41 | 1 | 15469 | DECAL REAR |
| 42 | 1 | 30811 | DECAL LOGO |
| 43 | 1 | 13901 | DECAL "PREVENTATIVE MAINTENANCE" |
| 44 | 1 | 14496 | DECAL "VACUUM MOTOR \& FILTER" |
| 45 | 1 | 15976 | DECAL "WIRING DIAGRAM". |
| 46 | 1 | 13974 | DECAL "CAUTION" |
| 47 | 2 | 16605 | DECAL "FOAM FILLED TIRES" |

- ITEMS NOT SHOWK


## BATTERY COMPONENTS REV. A



## BRUSH COMPONENTS

Them No. Qty. Part No. Description
$\begin{array}{lll}10 & 2 & 14795 \\ 11 & 2 & \text { SPRING }\end{array}$
11203963 CLAMP, BRUSH RETAINER
12403660 SCREW-PAN HEAD
13410431 SCREW
14217309 BRUSH RETAINER
15618022 SCREW, WOOD
1797917 YOKE AND RETAINER ASSEMBLED

26 INCH BRUSHES
Qty. Part No. Description
297917 YOKE \& RETAINER SET
299159 PAD HOLDER-14"
299156 BRUSH-POLY. 14"
299157 BRUSH-GRIT 14"

30 INCH BRUSHES
Qty. Part No. Description
297917
298566
YOKE \& RETAINER SET
298283
298373
PAD HOLDER-17"
BRUSH-POLY. 17"
BRUSH-GRIT 17"

FRAME ASSEMBLY-REV. A


Trem No. Qty. Part No. Description

| 1 | 1 | 15543 | BRACE, COVER |
| :---: | :---: | :---: | :--- |
| 2 | 1 | 10291 | FRAME, RH |
| 3 | 1 | 10279 | FRAME, LH |
| 5 | 2 | 10288 | BRACE |
| 6 | 1 | 10447 | CHANNEL ASSEMBLY, RH |
| 7 | 1 | 10285 | FRONT SIDE FRAME, RH |
| 8 | 1 | 10286 | FRONT SIDE FRAME, LH |
| 9 | 1 | 10282 | CROSS BAR |
| 10 | 1 | 14179 | BRACKET, GUIDE |
| 11 | 2 | 10284 | BRACE |
| 12 | 1 | 16032 | BRACE |
| 13 | 1 | 14089 | CROSS BAR |
| 14 | 11 | 10268 | PANEL BRACKET, REAR |
| 15 | 1 | 10295 | BRACKET, SOLUTION ROD GUIDE |
| 16 | 1 | 15914 | SUPPORT ROD, BATTERY COVER |
| 17 | 1 | 15915 | SUPPORT BRACKET, RH |
| 18 | 1 | 15917 | BRACKET, SUPPORT ROD |
| 20 | 1 | 10531 | SPRING BRACKET |
| 21 | 8 | 10267 | BRACKET, FRONT PANEL |
| 22 | 44 | 03261 | SCREW, |
| 23 | 1 | 14229 | BUSHING, NYLINER |
| 24 | 29 | 01589 | NUT |
| 25 | 4 | 05441 | SCREW |
| 26 | 20 | 13611 | NUTTCLIP ON, REAR PANELS |
| 27 | 26 | 02109 | SCREW |
| 28 | 6 | 03395 | COTTER PIN |
| 29 | 24 | 03301 | WASHER |
| 30 | 4 | 05427 | SCREW |
| 31 | 3 | 07533 | LOCKNUT |
| 32 | 12 | 03361 | SCREW |

NOTE: Unless indicated, Part No. applies to all models.


TRANSAXLE FRAME ASSEMBLY

| Ttem No. Qty. Part No. | Description |  |  |
| :---: | :---: | :--- | :--- |
| 1 | 5 | 03959 | SCREW-HEX.HEAD CAP |
| 2 | 1 | 19892 | CHASSIS M-R |
| 3 | 1 | 19921 | TRANSAXLE-36VDC |
| 4 | 2 | 18499 | KEY-SQUARE |
| 5 | 2 | 17313 | WHEEL, FOAM-FILLED |
| 6 | 2 | 03321 | WASHER-PLAIN 3/8 |
| 7 | 2 | 16671 | SCREW-HEX.HEAD CAP |
| 8 | 4 | 01574 | WASHER-LOCK(H/S)1/4" |
| 9 | 4 | 05427 | SCREW-ROUNDHEAD |
| 10 | 2 | 19294 | RETAINER-EZ TRANSAXLE |
| 11 | 2 | 19582 | PLATE-CASTER SPACER |
| 12 | 2 | 18773 | CASTER, SWIVEL |
| 13 | 8 | 17576 | SCREW-HEX.HEAD CAP |
| 14 | 3 | 17180 | CONTROL LINKAGE BOLT |
| 15 | 1 | 16745 | CONTROL LINKAGE BOLT |
| 16 | 3 | 30211 |  |
| 17 | 6 | 19666 | PIN-CLEVIS 1/2"DIAX $4^{\prime \prime}$ |
| 18 | 2 | 17180 | BRIDGE PIN |
| 19 | 3 | 12554 | CONTROL LINKAGE BOLT |
|  |  |  |  |

## *NOT SHOWN

NOTE: Unless indicated, Part No. applies to all models.

BRUSH COVER ASSEMBLY-26" REV. A


BRUSH COVER ASSEMBLY-26"
Ttem No. Qty. Part No. Description

| 1 | 2 | 07539 | NUT-PUSH |
| :---: | :---: | :---: | :---: |
| 2 | 2 | 10436 | COVER - RUB WHEEL |
| 3 | 2 | 10587 | RUB WHEEL |
| 4 | 4 | 07723 | WASHER-SPRING 1/2" |
| 5 | 2 | 10639 | SLEEVE, BEARING BRONZE |
| 6 | 1 | 17270 | RUB WHEEL BKT LH ASSY |
| 7 | 1 | 17265 | RUB WHEEL BKT RH ASSY |
| 8 | 4 | 03922 | SCREW-FLAT HD.SOCKET CAP |
| 9 | 1 | 19883 | BRUSHCOVER, $26{ }^{\prime \prime}$ WELDMENT |
| 10 | 1 | 17740 | BUMPER |
| 11 | 1 | 17735 | BUMPER STRAP |
| 12 | 1 | 16472 | SPRING-EXTENSION |
| 13 | 12 | 00067 | NUT-HEX.LOCK(KEPS) |
| 14 | 2 | 18564 | MOTOR-BRUSH(3/4HP) |
| 15 | 2 | 17802 | SCREW-SET SOCK.(NYLOCK) 3/8-16 X 1/2" |
| 16 | 2 | 16737 | COUPLER-BRUSH/PAD HOLDER |
| 17 | 2 | 02568 | WASHER-PLAIN (TYPE A) |
| 18 | 2 | 16672 | SCREW-HEX.HEAD(NYLOCK) |
| 19 | 8 | 16671 | SCREW-HEX.HEAD CAP(NYLK) |
| 20 | 3 | 16736 | ABSORBER BLOCK |
| 21 | 1 | 16731 | ABSORBER BLOCK |
| 22 | 1 | 19909 | BRACKET M-R 26" ${ }^{\text {3 }} 33^{\prime \prime}$ |
| 23 | 1 | 16728 | BRACKET |
| 24 | 2 | 19885 | LIFT BAR M-R $26{ }^{\prime \prime}$ |
| 25 | 1 | 16729 | BRACKET |
| 26 | 1 | 16730 | BRACKET,ADJUSTMENT |
| 27 | 2 | 17160 | SCREW-HEX.HEAD 1/4-20 X 3/4" |
| 28 | 1 | 17752 | RESTRAINER |
| 29 | 1 | 17751 | FLAT W/HOLES |
| 30 | 2 | 18486 | FITTING - PLASTIC ELBOW 3/8 NPT X 3/8 |
| 31 | 2 | 12554 | WASHER-PLAIN 1/2" (PLASTIC) |
| 32 | 1 | 16706 | SCREW-HEX.HEAD CAP |
| 33 | 2 | 12554 | WASHER-PLAIN 1/2" (PLASTIC) |
| 34 | 1 | 06387 | WASHER-LOCK (I/T) $1 / 2^{\prime \prime}$ |
| 35 | 1 | 16673 | NUT-HEX (NICKEL) |
| 36 | 2 | 12554 | WASHER-PLAIN 1/2" (PLASTIC) |
| 37 | 2 | 03472 | RING-RETAINING EXT 5/8 |
| 38 | 2 | 12554 | WASHER-PLAIN 1/2" (PLASTIC) |
| 38 | 1 | 16732 | SPACER |
| 44 | 1 | 16733 | SHAFT,GROOVED |
| 43 | 1 | 07551 | PIN-HANDLE YOKE PIVOT |
| 45 | 2 | 17733 | KEEPER |
| 46 | 2 | 03301 | WASHER-PLAIN 5/16" |
| 47 | 8 | 15067 | SCREW-PAN HEAD 5/16-18 $\times 3 / 4^{\prime \prime}$ |
| 48 | 2 | 06387: | WASHER-LOCK(I/T)1/2" |
| 449 | 2 | 99159 | PAD HOLDER |

NOTE: Unless indicated, Part No. applies to all models.


ThemNo. Qty. Part No. Description

| 1 | 2 | 10436 | COVER - RUB WHEEL |
| :---: | :---: | :---: | :---: |
| 2 | 4 | 07723 | WASHER-SPRING 1/2" |
| 3 | 1 | 16472 | SPRING-EXTENSION |
| 4 | 2 | 18564 | MOTOR-BRUSH(3/4HP) |
| 5 | 2 | 17802 | SCREW-SET SOCK. (NYLOCK) 3/8-16 $\times 1 / 2^{\prime \prime}$ |
| 6 | 2 | 16737 | COUPLER-BRUSH/PAD HOLDER |
| 7 | 2 | 02568 | WASHER-PLAIN (TYPE A) |
| 8 | 4 | 16671 | SCREW-HEX.HEAD CAP(NYLK) |
| 9 | 3 | 16736 | ABSORBER BLOCK |
| 10 | 1 | 16731 | ABSORBER BLOCK |
| 11 | 1 | 19909 | BRACKET M-R 26"\&33" |
| 12 | 1 | 16729 | BRACKET |
| 13 | 1 | 16730 | BRACKET,ADJUSTMENT |
| 14 | 2 | 17160 | SCREW-HEX.HEAD 1/4-20 X 3/4" |
| 15 | 1 | 17752 | RESTRAINER |
| 16 | 1 | 17751 | FLAT W/HOLES |
| 17 | 2 | 18486 | FITTING - PLASTIC ELBOW 3/8 NPT $\times 3 / 8$ |
| 18 | 2 | 12554 | WASHER-PLAIN $1 / 2^{n}$ (PLASTIC) |
| 19 | 1 | 16706 | SCREW-HEX.HEAD CAP |
| 20 | 2 | 06387 | WASHER-LOCK( $/$ /T) $1 / 2^{\prime \prime}$ |
| 21 | 1 | 16673 | NUT-HEX (NICKEL) |
| 22 | 1 | 16732 | SPACER |
| 23 | 1 | 16733 | SHAFT,GROOVED |
| 24 | 1 | 07551 | PIN-HANDLE YOKE PIVOT |
| 25 | 2 | 03301 | WASHER-PLAIN $5 / 16^{\prime \prime}$ |
| 26 | 6 | 15067 | SCREW-PAN HEAD 5/16-18 $\times 3 / 4^{*}$ |
| 27 | 1 | 19884 | BRUSHCOVER 33' WELDMENT |
| 28. | 2 | 14817 | WHEEL |
| 29 | 1 | 18500 | BUMPER |
| 30 | 1 | 19891 | LIFT BAR BRACKET |
| 31 | 2 | 19886 | LIFT BAR M-R 33'. |
| 32 | 2 | 03472 | RING - RETAINING EXT |
| 33 | 1 | 19917 | SHAFT, GROOVED |
| 34 | 2 | 02663 | RING - RETAINING $1 / \mathbf{2}^{\prime \prime}$ |
| 35 | 2 | 16581 | WASHER - PLAIN $1 / 2^{\prime \prime}$ |
| 36 | 1 | 17737 | BUMPER STRAP |
| 37 | 2 | 16672 | SCREW - HEX. HEAD 5/16-18 $\times 3 / 4^{\prime \prime}$ |
| 38 | 2 | 14500 | SCREW - HEX. HEAD CAP 1/2-13 $\times 2-1 / 2^{\prime \prime}$ |
| 39 | 2 | 10513 | NUT - HEX JAM 1/2-13 |
| 40 | 1 | 16746 | ARM |
| 慗娄 | 2 | 98566 | PAD HOLDER |

NOTE: Unless indicated, Part No. applies to all models.

## BRUSH LIFT ASSEMBLY - REV. A



Tem No. Qty. Part No. Description

| 1 | 1 | 03338 | KNOB, BRUSH LIFT |
| :---: | :---: | :---: | :--- |
| 2 | 1 | 03339 | ROLL PIN, PLUNGER |
| 3 | 1 | 03336 | PLUNGER, BRUSH LIFT |
| 4 | 1 | 03340 | SPRING |
| 5 | 1 | 10519 | BRUSH HANDLE SIA |
| 6 | 1 | 03658 | WASHER |
| 7 | 1 | 03736 | LOCKWASHER |
| 8 | 1 | 03536 | WASHER |
| 9 | 1 | 03959 | SCREW |
| 10 | 1 | 03301 | WASHER |
| 11 | 1 | 01577 | WASHER, LOCK |
| 12 | 1 | 01589 | HUT, HEX |
| 13 | 1 | 14829 | LINK, BRUSH LIFT |
| 14 | 2 | 03955 | BUSHING, FLANGED |
| 15 | 1 | 10631 | LINK ASSEMBLY |
| 16 | 3 | 02011 | SCREW, SET |
| 17 | 3 | 03964 | COLLAR |
| 18 | 1 | 11209 | LINK |
| 19 | 1 | 03946 | E-RING |
| 20 | 4 | 03470 | E-RING |
| 21 | 2 | 07551 | PIN-HANDLE YOKE PIVOT |
| 22 | 2 | 15313 | MOTOR ADJUSTMENT SPACER |
| 24 | 1 | 10530 | SPRING, LIFT |
| 25 | 4 | 03956 | BUSHING, FLANGED |
| 26 | 2 | 05537 | PIN, GROOVE |
| 27 | 1 | 14503 | RIVET, SOLID |
| 28 | 2 | 14502 | RIVET, SOLID |
| 29 | 4 | 03952 | LINK |
| 30 | 1 | 03939 | SPRING |
| 31 | 3 | 03736 | WASHER |
| 32 | 3 | 03395 | PIN, COTTER |
| 33 | 2 | 03361 | SCREW, ADJUSTMENT |
| 34 | 1 | 14830 | BRUSH LIFTSIA |
| 35 | 2 | 05282 | NUT, JAM |
| 36 | 1 | 14828 | LINKASSEMBLY |
| 37 | 1 | 04725 | SCREW |
| 38 | 2 | 01477 | NUT |
| 39 | 2 | 11302 | SCREW |
| 40 | 1 | 17133 | SWITCH, ACTUATOR |
| 41 | 3 | 10894 | LOCKNUT |
| 42 | 1 | 17207 | CLAMP, SWITCH |
| 43 | 1 | 17208 | PAD, RUBBER |
| 44 | 1 | 17134 | SWITCH TILT |
| 45 | 1 | 10542 | BEARING |
| 47 | 2 | 11028 | KEY |
| 48 | 2 | 10568 | KEY |
|  |  |  |  |

NOTE: Unless indicated, Part No. applies to all models.

## SQUEEGEE ASSY. AND LIFT MECHANISM - REV. A



## SQUEEGEE ASSEMBLY AND LIFT MECHANISM



NOTE: Unless indicated, Part No. applies to all models.


SOLUTION TANK AND CONTROL SYSTEM

| Them No. Qty. Part No. Description |  |  |  |
| :---: | :---: | :---: | :--- |
|  |  |  |  |
| 1,16 | 2 | 07533 | NUT-HEX.LOCK(P/T) |
| 2 | 1 | 15413 | SPACER |
| 3 | 1 | 14085 | BUMPER |
| 4 | 1 | 15461 | SCREW, NYLON |
| 5 | 4 | 01451 | SCREW |
| 6 | 1 | 13659 | COVER |
| 7 | 4 | 00617 | NUT-HEX.MACH.SCR. |
| 8 | 1 | 15381 | TANK-SOLUTION(F/K-M/R) |
| 9 | 1 | 16091 | CLAMP-HOSE(SCREW) |
| 10 | 1 | 19328 | NIPPLE-3/4" |
| 11,20 | 2 | 11323 | TEE |
| 12 | 2 | 11325 | FITTING-GALV.ADAPTOR |
| 13 | 2 | 06393 | FITTING-BRASS CPL |
| 14,28 | 1 | 16681 | VALVE-DRAIN |
| 18 | 1 | 03382 | HOSE-SOLUTION DRAIN |
| 17 | 2 | 17160 | SCREW-HEX.HEAD |
| 19 | 1 | 14210 | BRACKET,SOL.DISP. |
| 21 | 2 | 16457 | HOSE |
| 23 | 2 | 14209 | TUBE, PLASTIC VENT |
| 15 | 1 | 16682 | HOSE-WIBELLOWS SECTION |
| 24,43 | 2 | 16446 | BARB-TEE |
| 26 | 1 | 17308 | CLAMP-HOSE NYLON |
| 27 | 1 | 15740 | FITTING-BARB |
| 30 | 1 | 03409 | PIN-COTTER |
| 31 | 1 | 00851 | WASHER |
| 32 | 1 | 14178 | SPACER PIVOT |
| 33 | 1 | 14177 | ROD-SOLUTION CONTROL |
| 34 | 1 | 14182 | BUSHING-SNAP |
| 35 | 1 | 14228 | TUBE, PLASTIC |
| 36 | 1 | 14225 | KNOB-1" BALL |
| 37 | 1 | 19096 | FILTER-SOLUTION |
| 38 | 1 | 14180 | GAGE, COLOR |
| 39,40 | 2 | 03383 | FITTING-HOSE |
| 41,42 | 1 | 13491 | FITTING-GALV.BUSHING |
| 43 | 1 | 14229 | BUSHING-NYLINER(5/16"D) |
|  |  |  |  |

NOTE: Unless indicated, Part No. applies to all models.


## VACUUM TANK ASSEMBLY

| BILL OF MATERIALS |  |  |  |
| :---: | :---: | :---: | :---: |
| 1 TEM | QTY | PART NUMBER | DESCRIPTION |
| 1 | 8 | 01497 | NUT-FINISHED HEX 1/4-20 |
| 2 | 8 | 01574 | LOCK WASHER 1/4" |
| 3 | 2 | 03419 | GASKET - STAND PIPE |
| 4 | 2 | 03493 | NUT-THUMB 5/16-18 |
| 5 | 1 | 04381 | GROMMET 5/16 ID |
| 6 | 2 | 05282 | JAM NUT |
| 7 | 8 | 07741 | WASHER-SEALING 1/4 |
| 8 | 8 | 07744 | SCREW-HEX HEAD MACHINE $1 / 4-20 \times 1-5 / 16$ |
| 9 | 2 | 10260 | WASHER-SEALING |
| 10 | 1 | 15535 | TANK DRAIN PLATE |
| 11 | 2 | 16031 | SCREW-HEX HEAD CAP 5/16-18 X 1-1/2 |
| 12 | 1 | 16059 | STANDPIPE ASSEMBLY |
| 13 | 1 | 16089 | PLUG-DRAIN HOSE |
| 14 | 2 | 16091 | CLAMP-HOSE (1-1/4 $\times 2)$ |
| 15 | 1 | 16272 | VACUUM MOTOR |
| 16 | 1 | 16274 | VACUUM SHROUD |
| 17 | 1 | 16609 | GASKET |
| 18 | 1 | 16620 | HOSE W/BELLOWS SECTION |
| 19 | 1 | 17232 | VACUUM SHROUD COVER/GASKET |
| 20 | 1 | 17276 | TANK-RECOVERY |
| 21 | 1 | 17646 | GASKET, DRAIN PLATE |
| 22 | 1 | 18563 | NOZZLE-DRAIN HOSE |
| 23 | 1 | 31230 | COVER |
| 24 | 1 | 18925 | FLOAT CAGE (M/R) |
| 25 | 1 | 18771 | FLOAT (L/R \& M/R) |
| 26 | 1 | 17274 | DECAL |
| 27 | 1 | 16277 | VACUUM MOTOR ASS'Y (SERVICE ONLY) |
| 28 | 1 | 16278 | VACUUM MOTOR UPGRADE KIT |
|  |  |  | REQUIRED TO UPGRADE FROM 2-STAGE TO 3-STAGE VAC MOTOR. INCLUDES all NECESSARY PARTS. |

* NOT SHOWN


## WIRING DIAGRAM REV. A



WIRING DIAGRAM
Item No. Qty. Part No. Description

| 1 | 2 | 30086 | WIRE NUT-BLUE |
| :---: | :---: | :---: | :---: |
| 2 | 1 | 12329 | GAGE-BATTERY CONDITION |
| 3 | 1 | 10333 | RELAY |
| 4 | 1 | 30263 | SPEED CONTROL MODULE |
| 5 | 2 | 16924 | SCREW-PAN HEAD(PHILLIPS) |
| 6 | 1 | 30266 | WIRING HARNESS, SPEED CONTROL |
| 7 | 1 | 30266 | WIRING HARNESS, SPEED CONTROL |
| 8 | 1 | 30266 | WIRING HARNESS, SPEED CONTROL |
| 9 | 1 | 30266 | WIRING HARNESS, SPEED CONTROL |
| 10 | 1 | 03911 | BUS BAR |
| 11 | 4 | 03914 | WASHER-PLAIN (BRASS) |
| 12 | 4 | 03913 | SCREW-FLAT HEAD 3/8-16 X ${ }^{\prime \prime}$ (BRASS) |
| 13 | 4 | 03915 | NUT-HEX.JAM |
| 14 | 1 | 05215 | SWITCH |
| 15 | 4 | 05582 | SCREW-SOCKET HEAD CAP 1/4-20 $\times 1$ (COPPER FLSH) |
| 16 | 1 | 05436 | WIRE MARKER M2 |
| 17 | 1 | 05539 | WIRE |
| 18 | 4 | 16129 | NUT-HEX.LOCK(KEPS) 1/4-20 |
| 19 | 1 | 06503 | SWITCH |
| 20 | 1 | 06508 | JUMPER, SWITCH |
| 21 | 1 | 03909 | LEAD 8GA BLACK |
| 22 | 1 | 10335 | WIRE |
| 23 | 1 | 10336 | WIRE |
| 24 | 1 | 10337 | POSITIVE SWITCH LEAD |
| 25 | 1 | 10338 | JUMPER, RELAY |
| 26 | 1 | 10339 | WIRE |
| 30 | 2 | 10517 | WIRE |
| 31 | 2 | 10518 | WIRE |
| 32 | 1 | 10549 | TERMINAL BOARD |
| 33 | 1 | 10629 | POSITIVE LEAD |
| 34 | 2 | 12318 | INDICATOR LEAD |
| 35 | 2 | 14227 | CONNECTOR |
| 36 | 1 | 14454 | CIRCUIT BREAKER |
| 38 | 2 | 15956 | DOUBLE MALE CONNECTOR |
| 39 | 1 | 18979 | CABLE-BATTERY |
| 40 | 1 | 18978 | CABLE-BATTERY |
| 41 | 2 | 19420 | CABLE-BATTERY,JUMPER |
| 43 | 2 | 15243 | TERMINAL-CHARGER CONTACT |
| 44 | 1 | 17134 | SWITCH, TILT |
| 46 | 2 | 17181 | WIRE ASSY., VAC MOTOR |
| 47 | 1 | 15242 | CONNECTOR-CHARGER(36V) |
| 48 | 2 | 02958 | NUT-HEX.LOCK(KEPS) |
| 50 | 1 | 18977 | CABLE-BATTERY/IGHT 6 GA. $\times 13^{\prime \prime}$ BLK $37{ }^{\prime \prime}$ ORANGE |
| NOT | WN |  |  |
| NOTE: Unless indicated, Part No. applies to all models. |  |  |  |

## BRUSH COMPONENTS - REV. A



## BATTERY COMPONENTS

Them No. Qty. Part No. Descríption

| 1 | 1 | 16317 | BATTERY TRAY |
| :--- | :--- | :--- | :--- |
| 2 | 3 | 99519 | BATTERY-12V/185AH(WET) |
| 2 | 3 | 99512 | BATTERY-12V/215AH(WET) |

## BATTERY CHARGER 99515 - REV. A



## BATTERY CHARGER 99515

Ttem No. Qty. Part No. Description

| 1 | 1 | 22498 | CORD, AC WITH PLUG |
| :--- | :--- | :--- | :--- |
| 3 | 1 | 24013 | FUSE HOLDER, AC |
| 4 | 1 | 10218 | FUSE, AC |
| 6 | 1 | 22544 | SWITCH, STOP |
| 7 | 1 | 23349 | SWITCH, START |
| 8 | 1 | 22495 | CIRCUIT BREAKER |
| 9 | 1 | 10207 | RECTIFIERS WITH MOUNTING PLATE |
| 10 | 1 | 10210 | CAPACITOR |
| 12 | 1 | 10414 | DC OUTPUT CABLE, POSITIVE |
| 13 | 1 | 10415 | DC OUTPUT CABLE, NEGATIVE |
| 14 | 1 | 22497 | AMMETER |
| $*$ | 1 | 02961 | STRAIN RELIEF BUSHING |


$20$

## CONTROL

Item No. Qty. Part No. Description

| 1 | 1 | 19940 | PANEL-FRONT (MIDRANGE) |
| :---: | :---: | :---: | :---: |
| 2 | 1 | 19950 | HANDLE-MIDRANGE |
| 3 | 2 | 03922 | SCREW-FLAT HD.SOCKET CAP 5/16-18 $\times 3 / 4{ }^{\prime \prime}$ |
| 4 | 4 | 00696 | WASHER-PLAIN \#10 |
| 5 | 4 | 03261 | SCREW-TCT (F) PAN HEAD \#10-32 $\times 3 / 8$ " |
| 6 | 1 | 19963 | HOUSING-SWITCH BOX (STL) |
| 7 | 4 | 17862 | SCREW-TRUSS HEAD \#10-32 $\times 1$ 1" (SS) |
| 8 | 1 | 30449 | FRAME-UPPER (RH SIDE) |
| 9 | 2 | 30216 | STANDOFF-CUSTOM (CRS) |
| 10 | 1 | 19943 | ENCLOSURE (MIDRANGE) |
| 11 | 1 | 30263 | SPEED CONTROLLER (MR) |
| 12 | 1 | 30448 | FRAME-UPPER (LH SIDE) |
| 13 | 2 | 00600 | SCREW-RND HEAD \#8-32 X 3/4" |
| 14 | 2 | 03868 | NUT - HEX. LOCK(NYL.INS.) 3/8-16 |
| 15 | 2 | 30217 | WASHER-SEALING $3 / 8{ }^{\prime \prime}$ |
| 16 | 1 | 04145 | GROMMET 3/8 ID $\times 9 / 64$ WALL |
| 17 | 2 | 06686 | SCREW-RHD. HD. \#6-32 X 1" |
| 18 | 1 | 19357 | SWITCH-PUSH BUTTON (DPST) |
| 19 | 1 | 19964 | SWITCH BOX-BOTTOM (MR) |
| 20 | 2 | 19358 | LEVER-HANDLE SWITCH |
| 21 | 1 | 30911 | BRACKET-PLATE |
| 22 | 2 | 19692 | SCREW - SHOULDER-STEEL 1/4"D $\times 3 / 8^{\prime \prime}$ |
| 23 | 4 | 03361 | SCREW - HEX HEAD CAP $5 / 16-18 \times 1{ }^{\prime \prime}$ |
| 24 | 4 | 01589 | NUT - HEX, LOCK (P/T NYLOK) 5/16-18 |


[^0]:    *Effective January $1^{\text {st }}$, 2001. Terms subject to change without notice.

    1) Windshear ${ }^{\text {TM }}$ Blower-Dryer, Insulation Blowers, CW 50, CW 100, and Duo-Upright Carpetkeepers ${ }^{\text {TM }}$ are warranted for 1 (one) year for parts and labor.
    2) Warranties on the ICC1, KMR 1200, KMR 1250, and KMR 1700 are 24 months parts/6 months labor OR 1000 hours of operation, whichever comes first. Warranties on the BR and BD 1000 are 24 months parts/12 months labor OR $\mathbf{1 0 0 0}$ hours of operation, whichever comes first.
