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We Make it Right, Right Here!!

***SOLAR-Ray® Marine Searchlight
with Distant Electric Control
Model 0887***



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1. GENERAL

This manual contains a description, installation procedure and simplified diagrams of the SOLAR-Ray® Searchlight with Distant Electric Control, Model 0887.

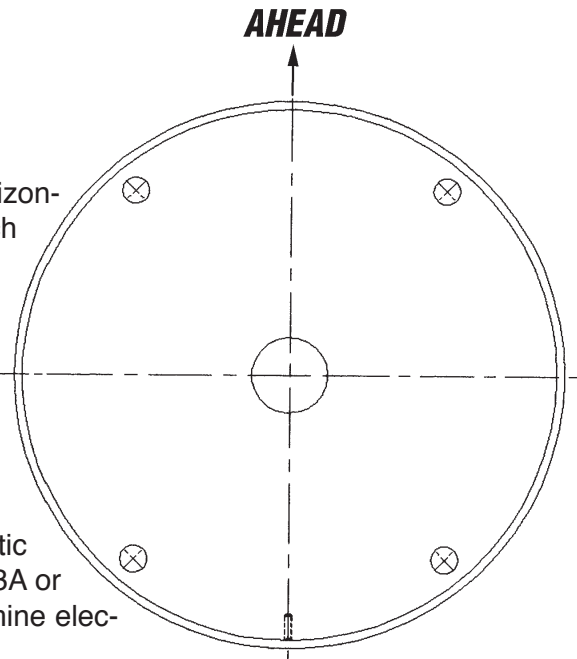
2. DESCRIPTION

The Model 0887 (Figure 1) combines an incandescent SOLAR-Ray® Marine Searchlight, with electrical control of azimuth and elevation and with the added advantage of remote control locations. The Model 0887 has a rotating base and gear assembly activated by two motors housed in a base. The motors are controlled by switches on master control unit or slave control unit (Figure 2). 12/24V D.C. or 115 VAC versions can be supplied.

<u>Model No.</u>	<u>Description</u>
0887 Searchlight	Solar-Ray® Marine Searchlight with D.E.C., Essentially a Model 885 head modified to mate with the Model 855 Distant Electric Control.
855	Distant Electric Mount only. It is part of the model 0887 Complete Searchlight System. Not available separately due to integration with the searchlight head.

3. INSTALLATION

Prior to installing the Model 0887 Mount, a horizontal mounting surface must be provided on which the Model 0887 will rest. A 1/2 inch thick flat steel plate or equivalent attached to a suitable superstructure is satisfactory. **The mounting surface is provided by the installer. The 1/2 inch plate, 12-5/8 inch minimum diameter must have a hole pattern comprised of four 1/2-13 tapped holes on a 11-3/32 inch bolt circle to match the mounting holes in the Model 0887.** Refer to Interconnection Schematic Diagrams (Figure 4), and the notes on Figure 3A or 3B (120VAC or 12/24V D.C. Version) to determine electric cabling for system hook-up.



Mounting Hole Orientation

4. MAINTENANCE

For Distant Electric Base troubleshooting, refer to interconnection/schematic diagrams of the Model 0887 Mount, Figure 3. Twice yearly, apply commercial grade marine lubricant (grease) to gears. Check for loose electrical connections, and integrity of the case seal.

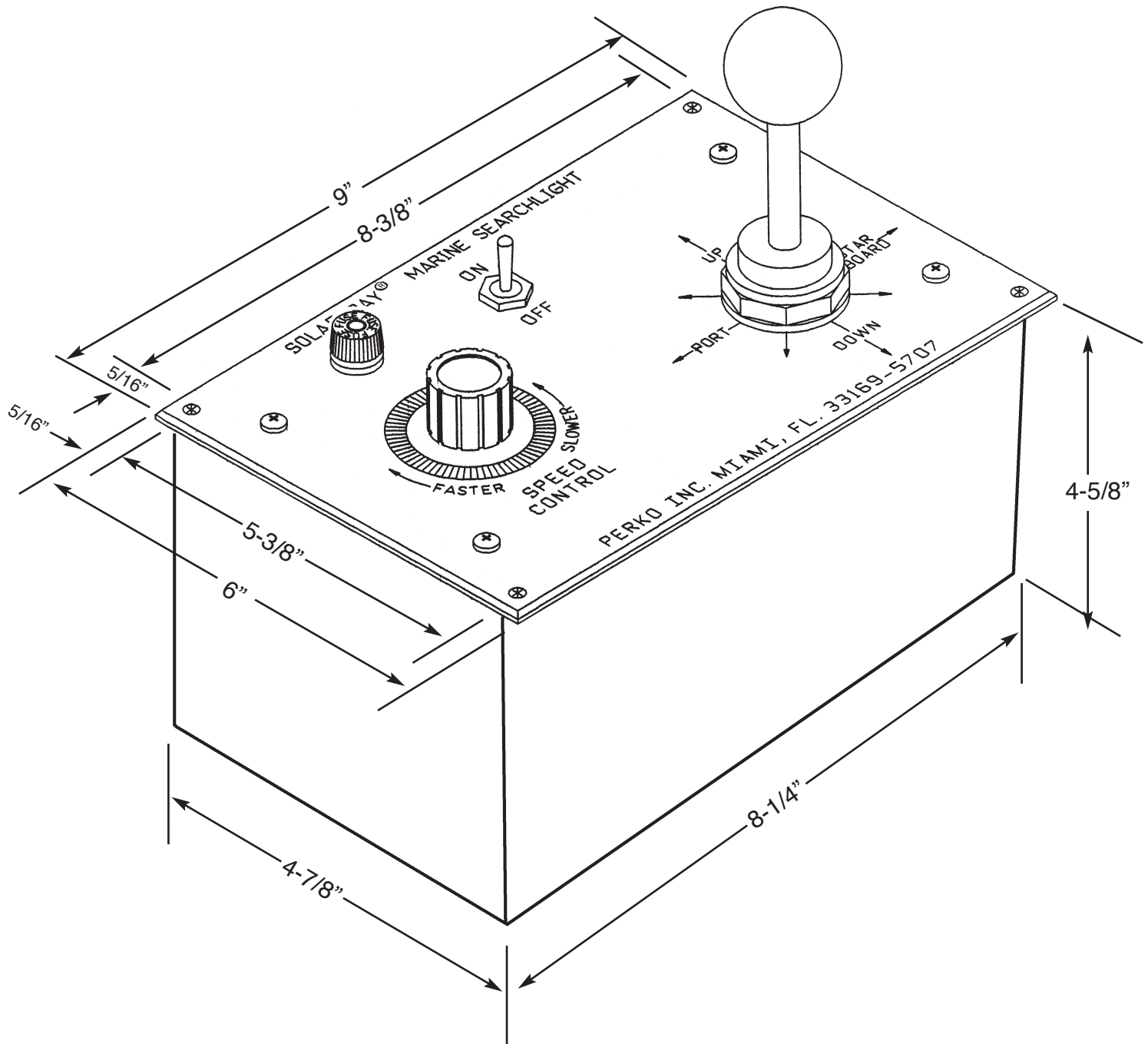
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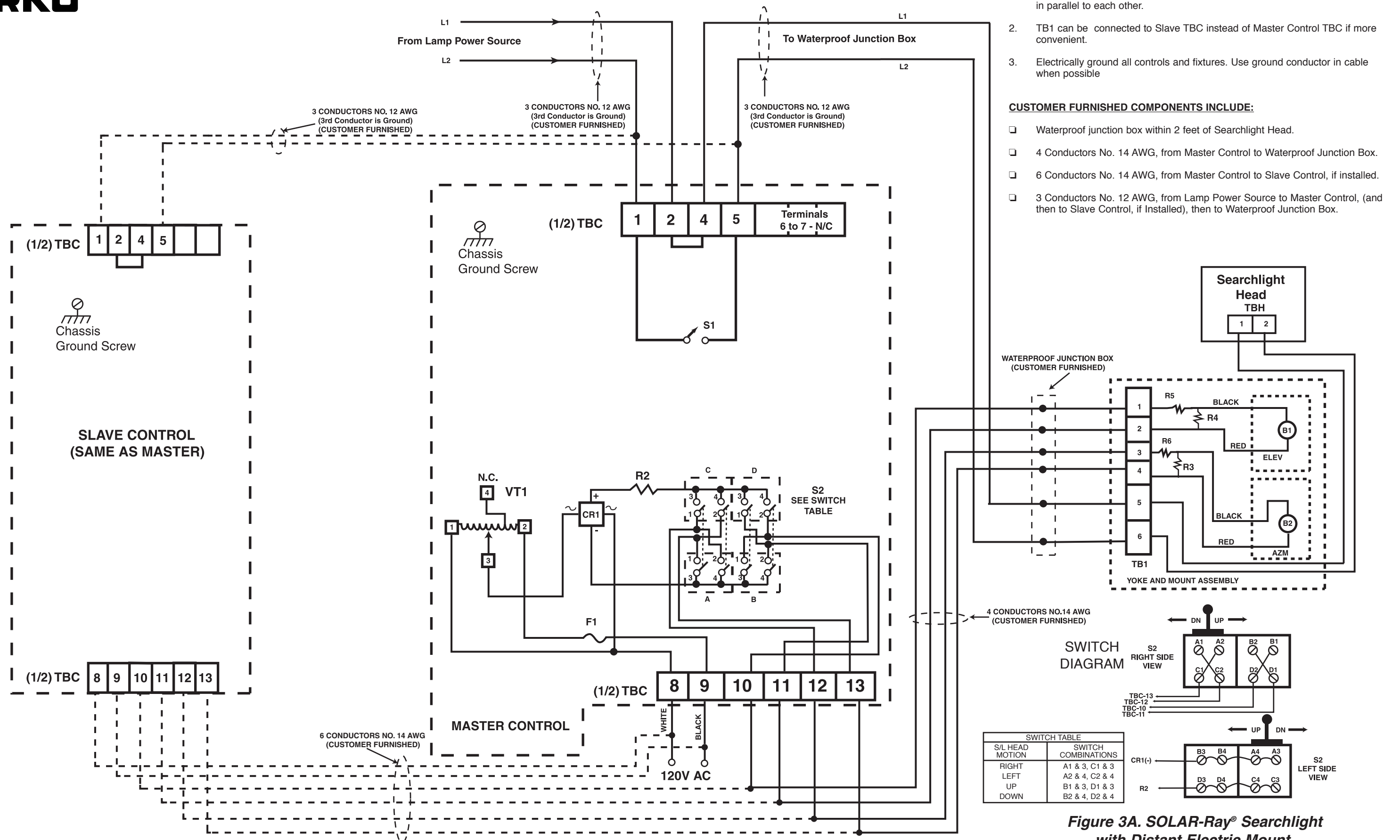


Figure 1. SOLAR-Ray® Distant Electric Mount, Model 0887

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FIGURE 2.
SOLAR-RAY® MASTER OR SLAVE CONTROL A6





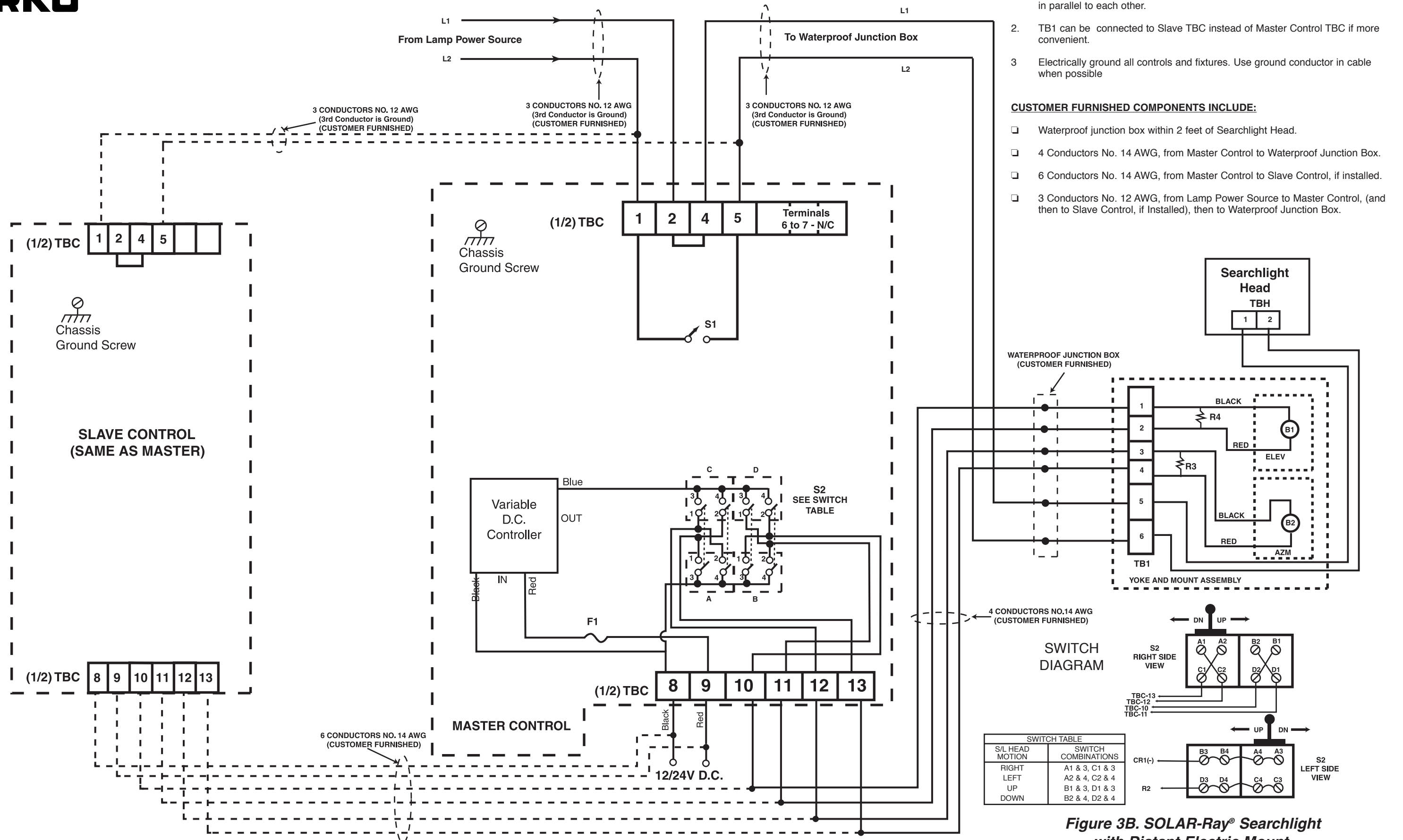
NOTES:

1. Master and Slave Controls are identical, interchangeable and are connected in parallel to each other.
2. TB1 can be connected to Slave TBC instead of Master Control TBC if more convenient.
3. Electrically ground all controls and fixtures. Use ground conductor in cable when possible

CUSTOMER FURNISHED COMPONENTS INCLUDE:

- Waterproof junction box within 2 feet of Searchlight Head.
- 4 Conductors No. 14 AWG, from Master Control to Waterproof Junction Box.
- 6 Conductors No. 14 AWG, from Master Control to Slave Control, if installed.
- 3 Conductors No. 12 AWG, from Lamp Power Source to Master Control, (and then to Slave Control, if Installed), then to Waterproof Junction Box.

Figure 3A. SOLAR-Ray® Searchlight with Distant Electric Mount. Model 0887 Schematic Diagram For 120 VAC Mount



NOTES:

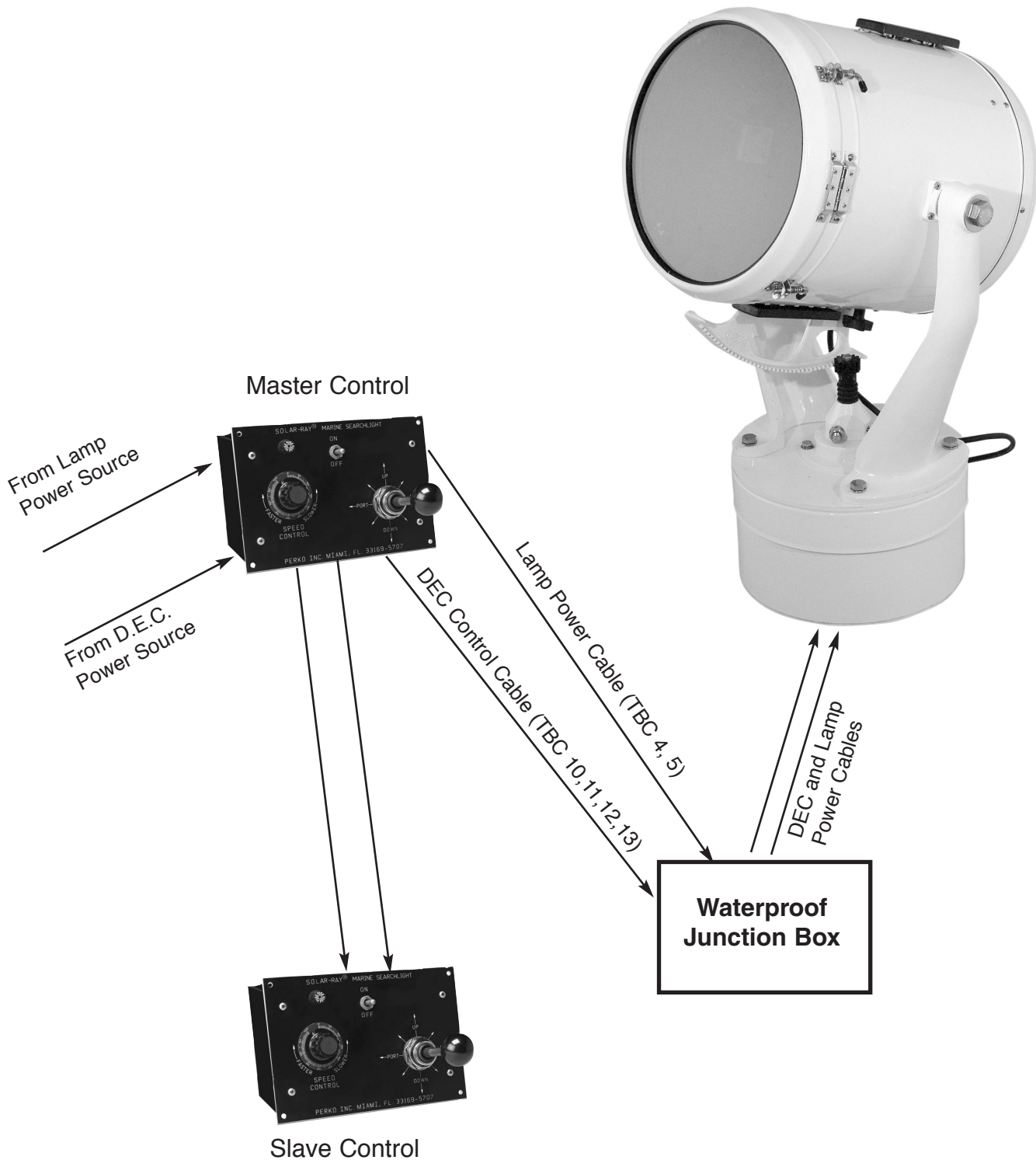
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Figure 3B. SOLAR-Ray® Searchlight with Distant Electric Mount. Model 0887 Schematic Diagram For 12/24V D.C. Mount

FIGURE 4.
SOLAR-RAY® INTERCONNECTION DIAGRAM



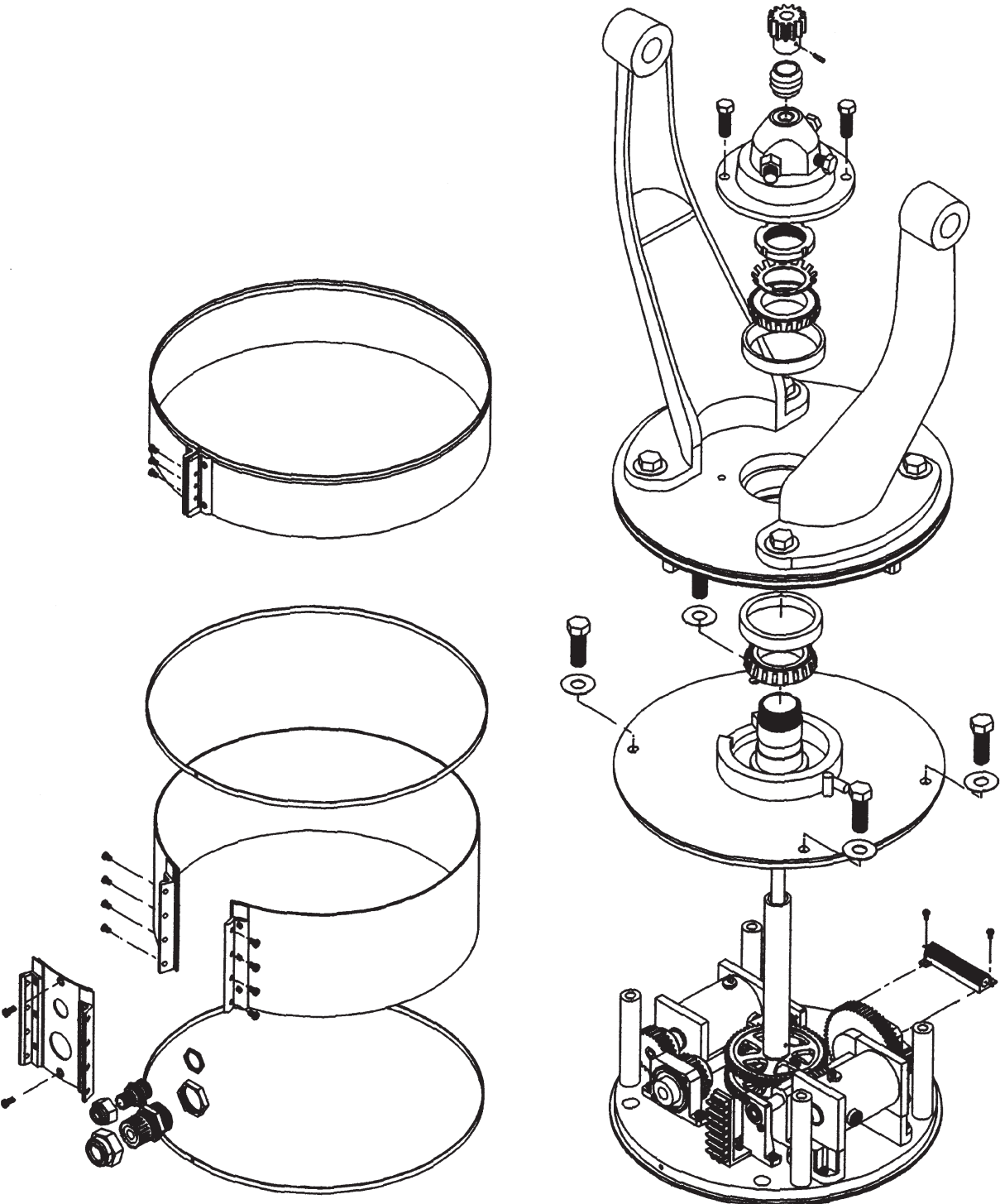
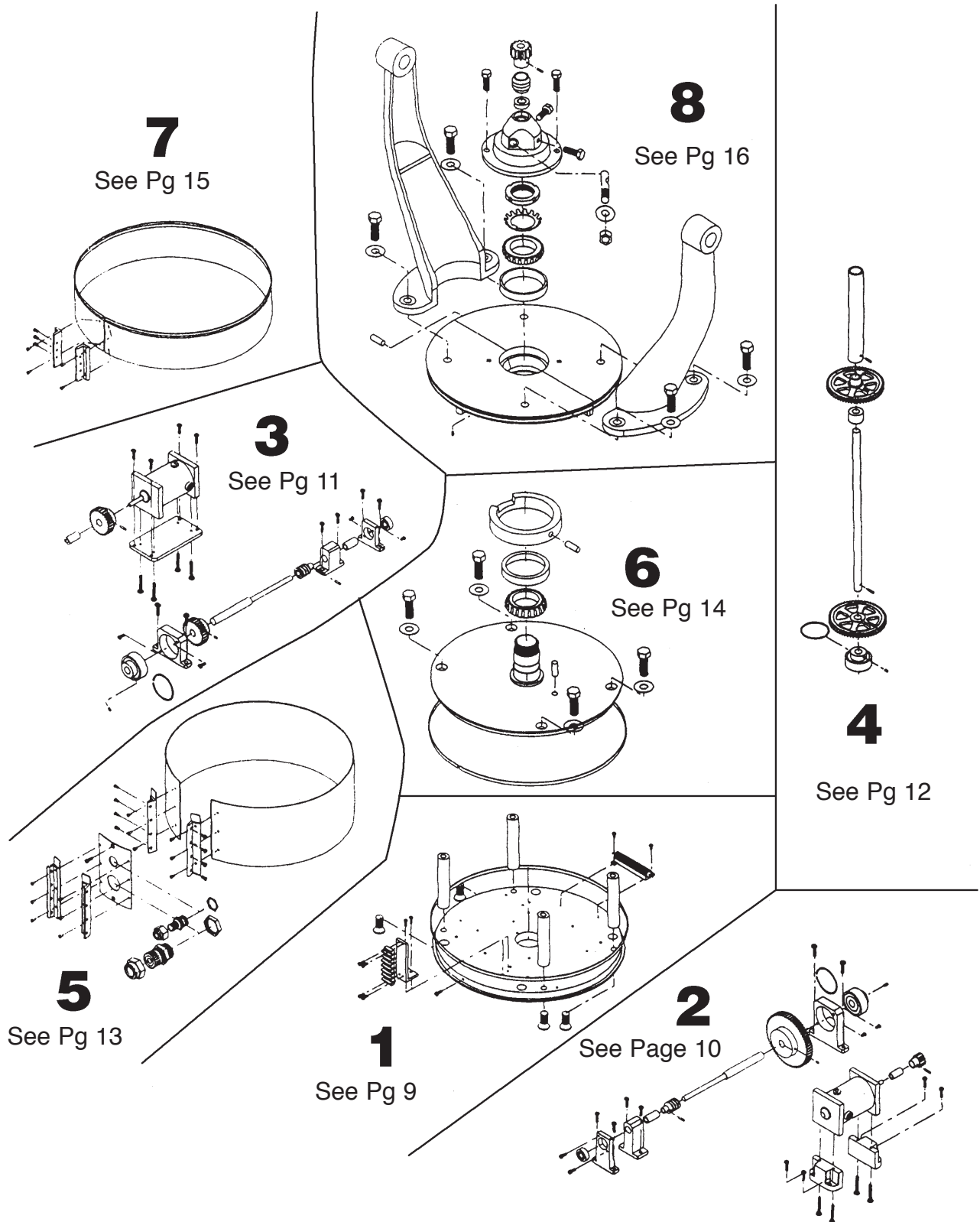
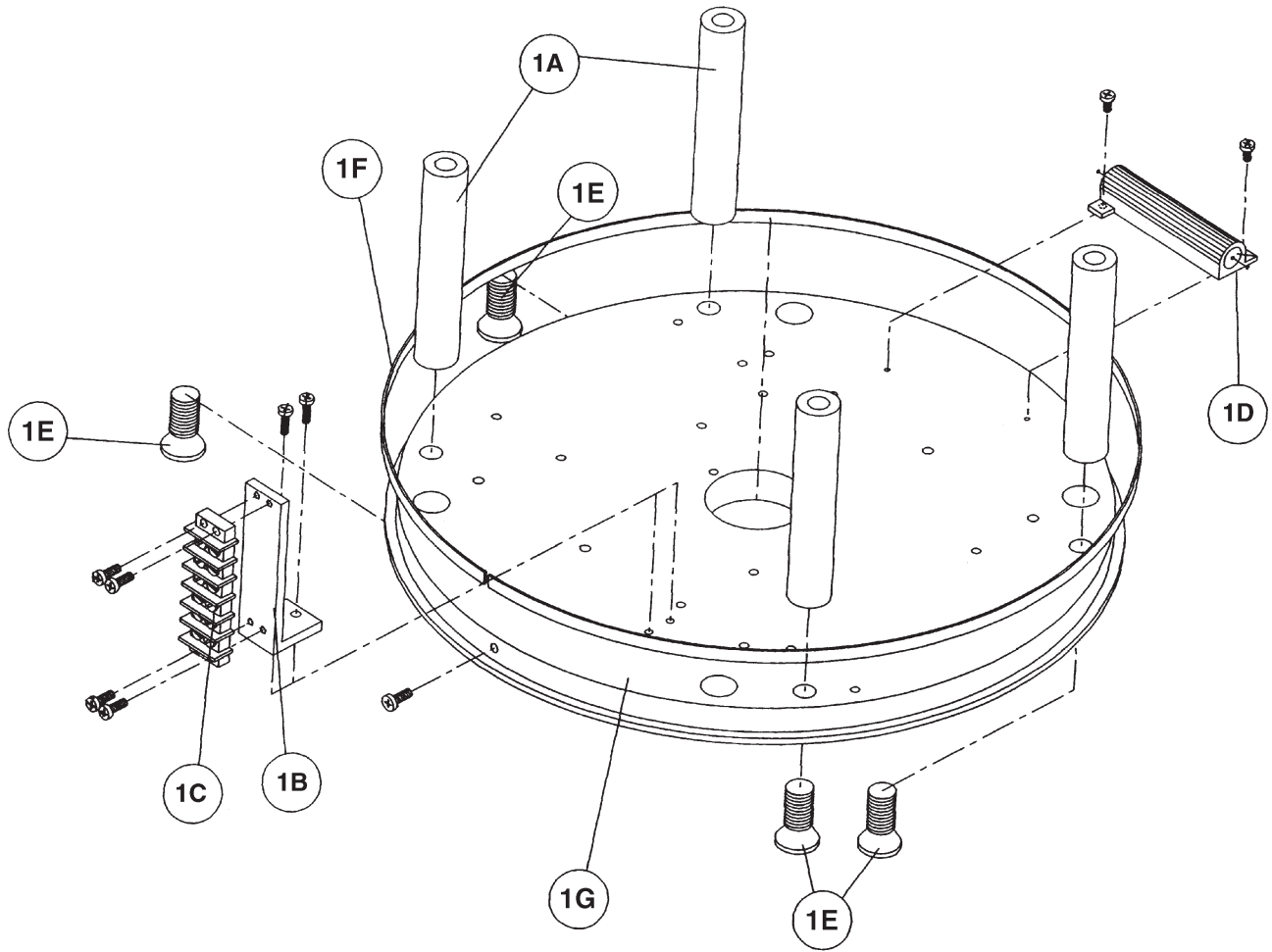


Figure 5. Exploded View of Model 0887

DEC Spare Parts



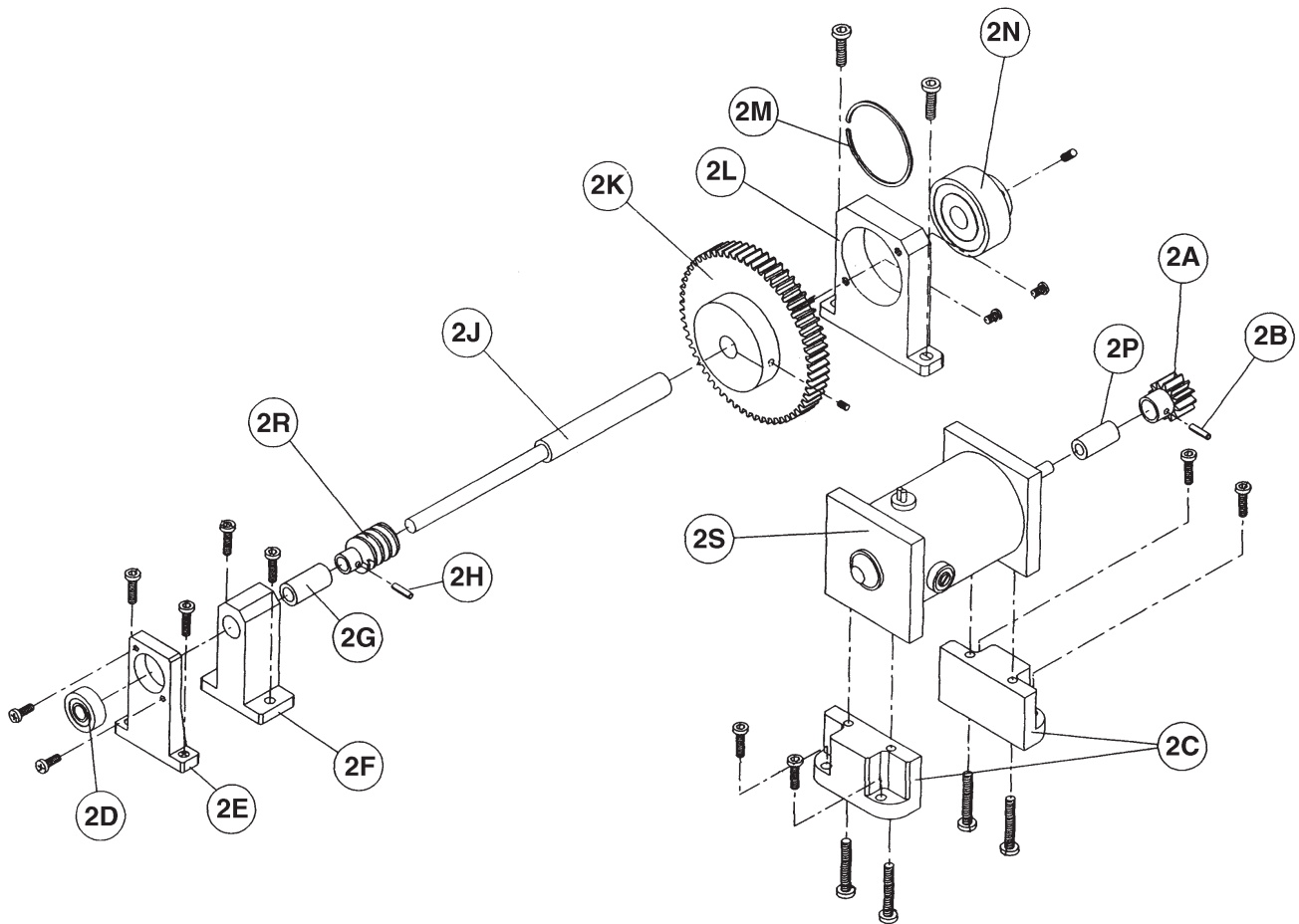
DEC Spare Parts - Section 1
Lower Base Plate Assembly (as shown)
Part No. 0855 0010



<i>Item No.</i>	<i>Description</i>	<i>Qty</i>	<i>PERKO Fig. No.</i>
1A	Post	4	0855 01A
1B	Retainer, Terminal Block	1	0855 01B
1C	Terminal Block	1	9521 064
1D	Resistor	1	9510 028
1E	Screw, Post Retaining	4	0855 01E
1G	Lower Base Plate	1	0855 01G

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

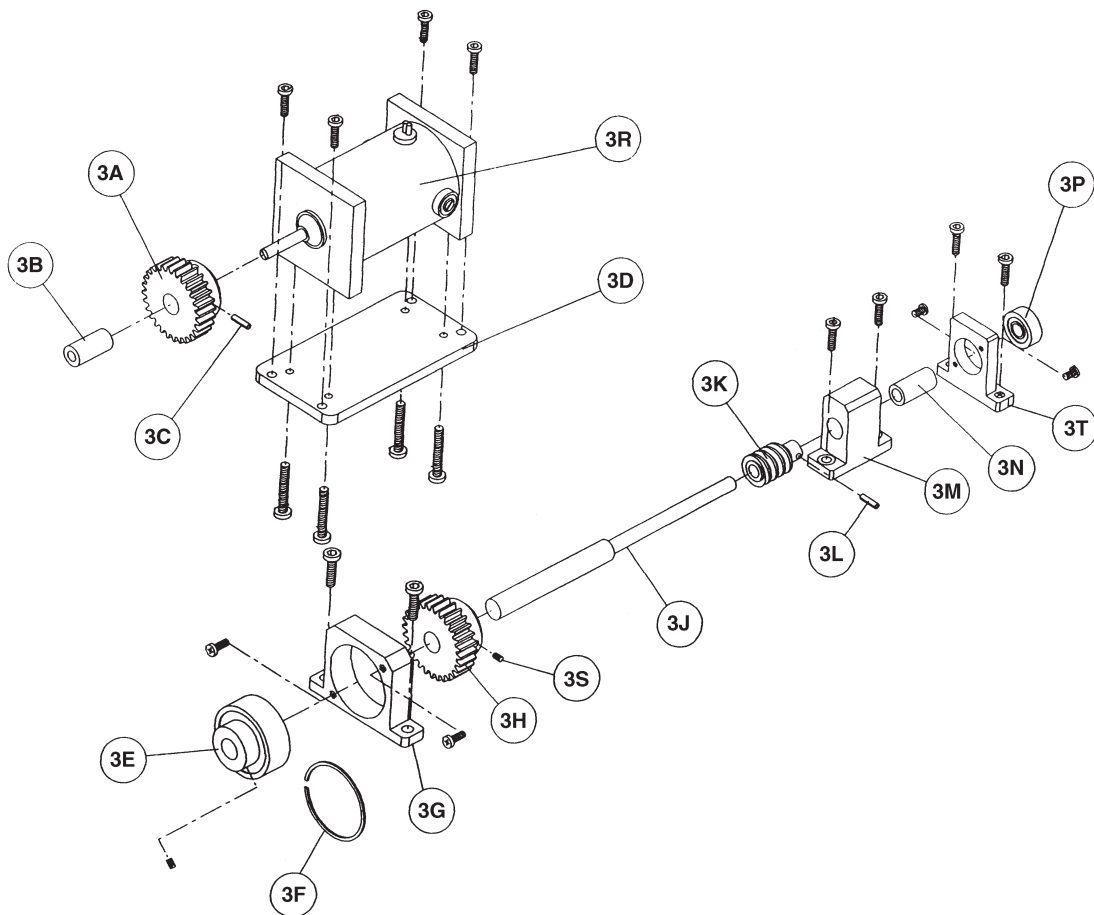
PERKO® DEC Spare Parts - Section 2
Motor & Drive Assembly (as shown)
Part No. 0855 0020



<u>Item No.</u>	<u>Description</u>	<u>Qty</u>	<u>PERKO Fig. No.</u>
2A	Spur Gear (12 Teeth)	1	0855 02A
2B & 2H	Roll Pin - 1/8" x 5/8"	1	0855 02B
2C	Spacer Block (Motor Mount)	2	0855 02C
2D	Ball Bearing (5/16" I.D.)	1	0855 02D
2E	Retainer, Ball Bearing	1	0855 02E
2F	Retainer, Sleeve	1	0855 02F
2G	Sleeve, Bearing	1	0855 02G
2J	Axle	1	0855 02J
2K	Spur Gear (60 Teeth)	1	0855 02K
2L	Mount Block, Bearing	1	0855 02L
2M & 2N	Ring, Retainer & Bearing Ball	1	9551 036
2P	Bushing 3/8 O.D. x 1/4 I.D. x 15/16	1	0855 02P
2R	Worm Gear	1	9551 060
2S	DC Motor (Dayton # 12835)	1	0855 02S

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

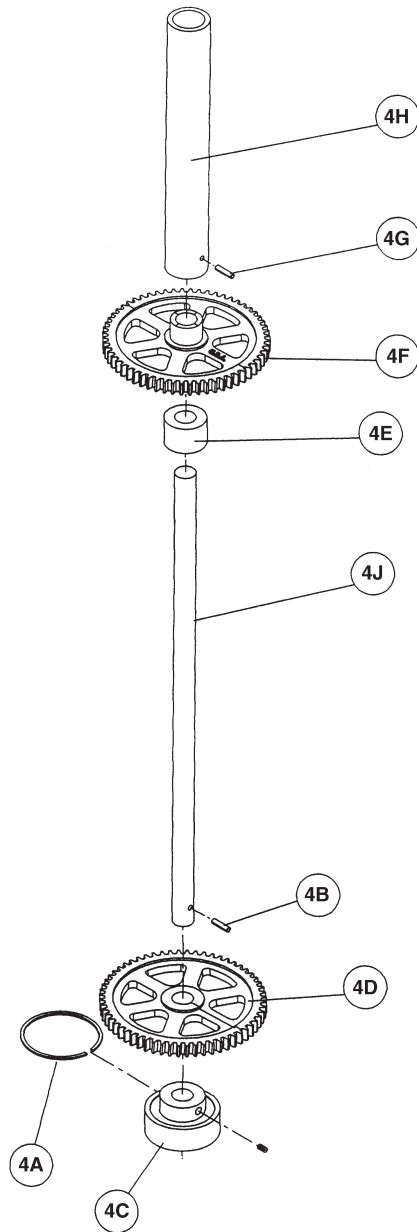
PERKO® DEC Spare Parts - Section 3
Motor & Drive Assembly (as shown)
Part No. 0855 0030



<u>Item No.</u>	<u>Description</u>	<u>Qty</u>	<u>PERKO Fig. No.</u>
3A & 3H	Spur Gear (28 Teeth)	1	0855 03A
3B	Reducer, Gear	1	0855 03B
3C, 3L & 3S	Roll Pin - 1/8" x 5/8"	1	0855 02B
3D	Plate, Motor Mount	1	0855 03D
3E & 3F	Ball Bearing & Ring Retainer	1	9551 036
3G	Bearing Mount	1	0855 03G
3J	Axle	1	0855 03J
3K	Worm Gear	1	9551 060
3M	Retainer, Sleeve, Bearing	1	0855 03M
3N	Sleeve, Bearing	1	0855 03N
3P	Ball Bearing	1	0855 03P
3R	DC Motor (Dayton # 12835)	1	0855 02S
3T	Retainer, Ball Bearing	1	0855 03T

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

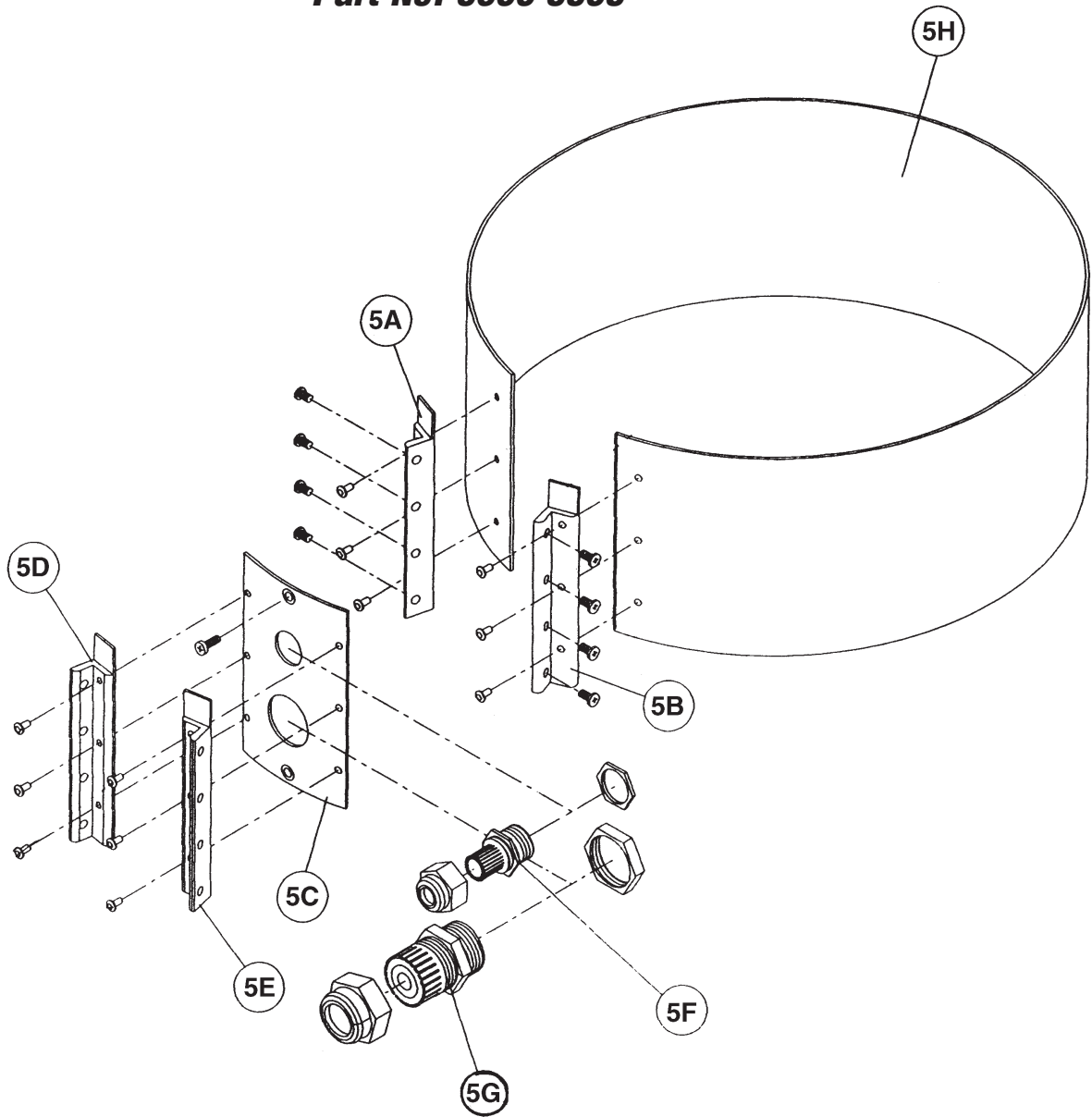
**DEC Spare Parts - Section 4
Drive Assembly (as shown)
Part No. 0855 0040**



Item No.	Description	Qty	PERKO Fig. No.
4A & 4C	Ring Retainer & Ball Bearing	1	9551 036
4B & 4G	Roll Pin - 1/8" x 5/8"	1	0885 02B
4D	Worm Gear, Vertical Control	1	9551 058
4E	Spacer, Gear	1	0855 04E
4F	Worm Gear, Horizontal Control	1	9551 058
4H	Tubing, Horizontal Control	1	0855 04H
4J	Rod, Vertical Control	1	0855 04J

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

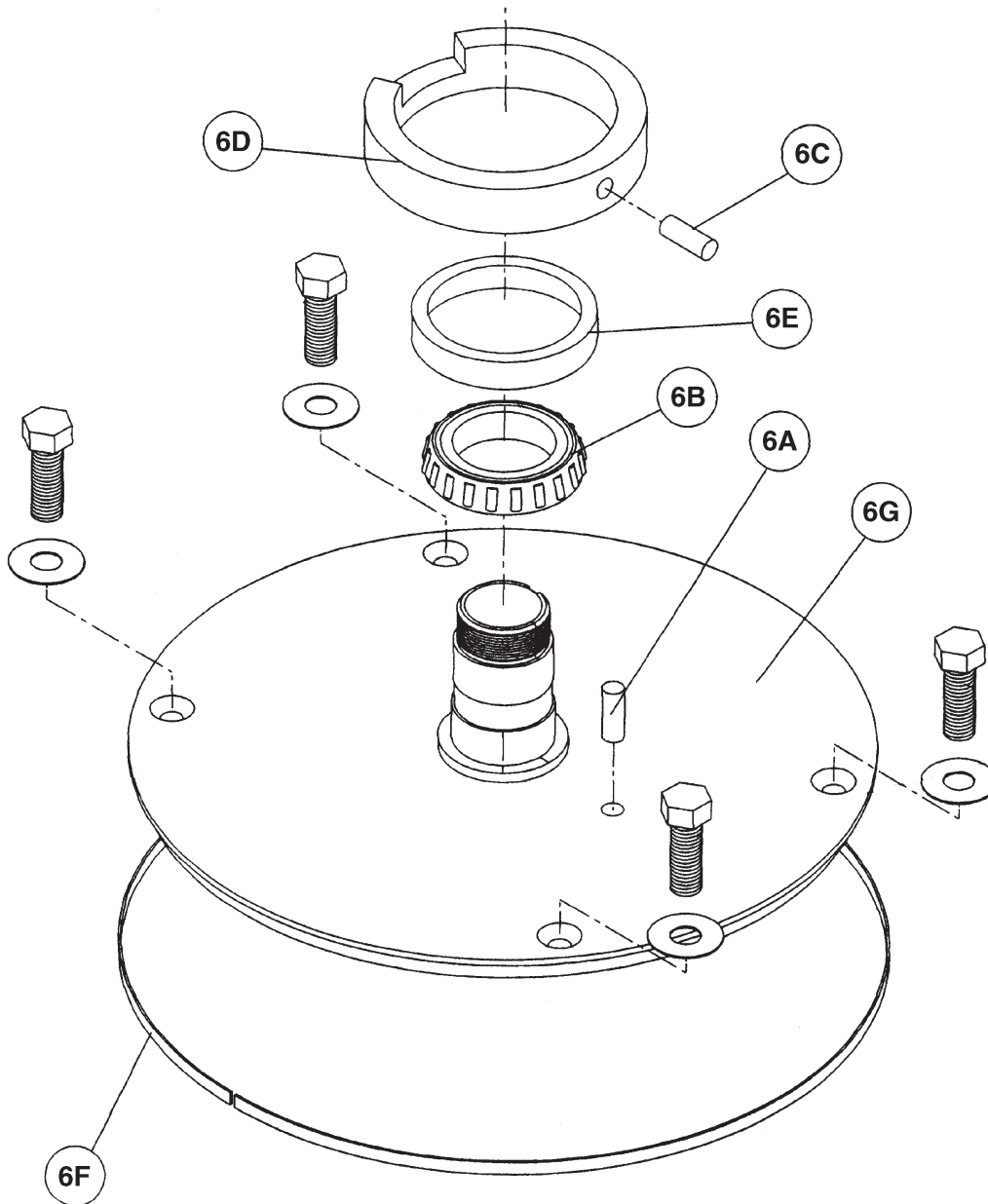
PERKO® **DEC Spare Parts - Section 5**
Main Cover Assembly (as shown)
Part No. 0855 0050



<i>Item No.</i>	<i>Description</i>	<i>Qty</i>	<i>PERKO Fig. No.</i>
5A	Left Leaf, Cover Ring	1	0855 05A
5B	Right Leaf, Cover Ring	1	0855 05B
5C	Door, Cover Ring	1	0855 05C
5D	Left Leaf, Door	1	0855 05D
5E	Right Leaf, Door	1	0855 05E
5F	Strain Relief	1	0855 05F
5G	Strain Relief, (1" npt)	1	9551 070
5H	Cover Ring, Bottom	1	0855 05H

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

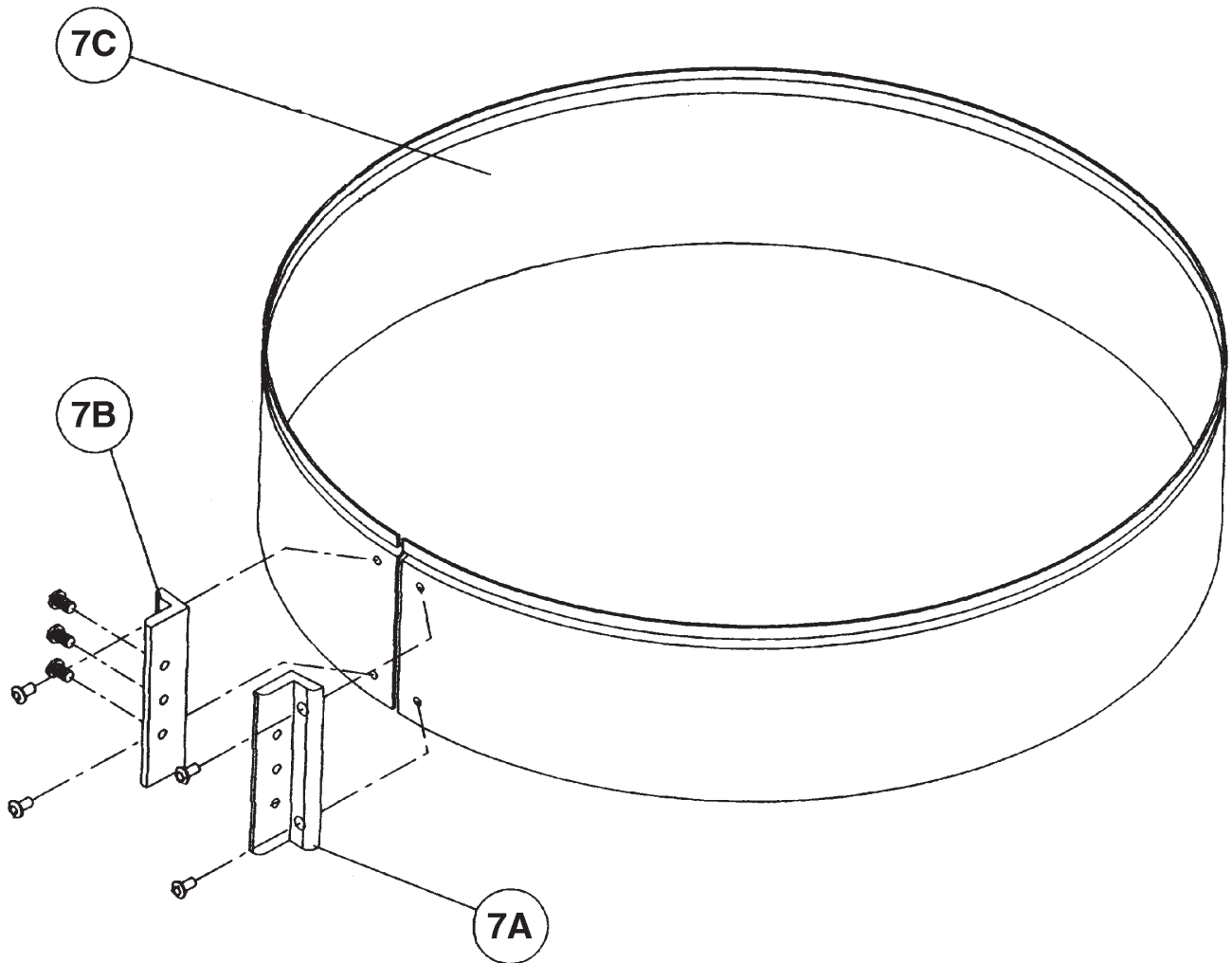
PERKO® DEC Spare Parts - Section 6
Upper Base Plate Assembly (as shown)
Part No. 0855 0060



<i>Item No.</i>	<i>Description</i>	<i>Qty</i>	<i>PERKO Fig. No.</i>
6A & 6 C	Dowel Pin (3/8" Dia.)	1	0855 06A
6B	Bearing	1	9506 008
6D	Sliding Stop	1	9506 036
6E	Ring, Bearing	1	9506 010
6G	Plate, Cover	1	0855 06G

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

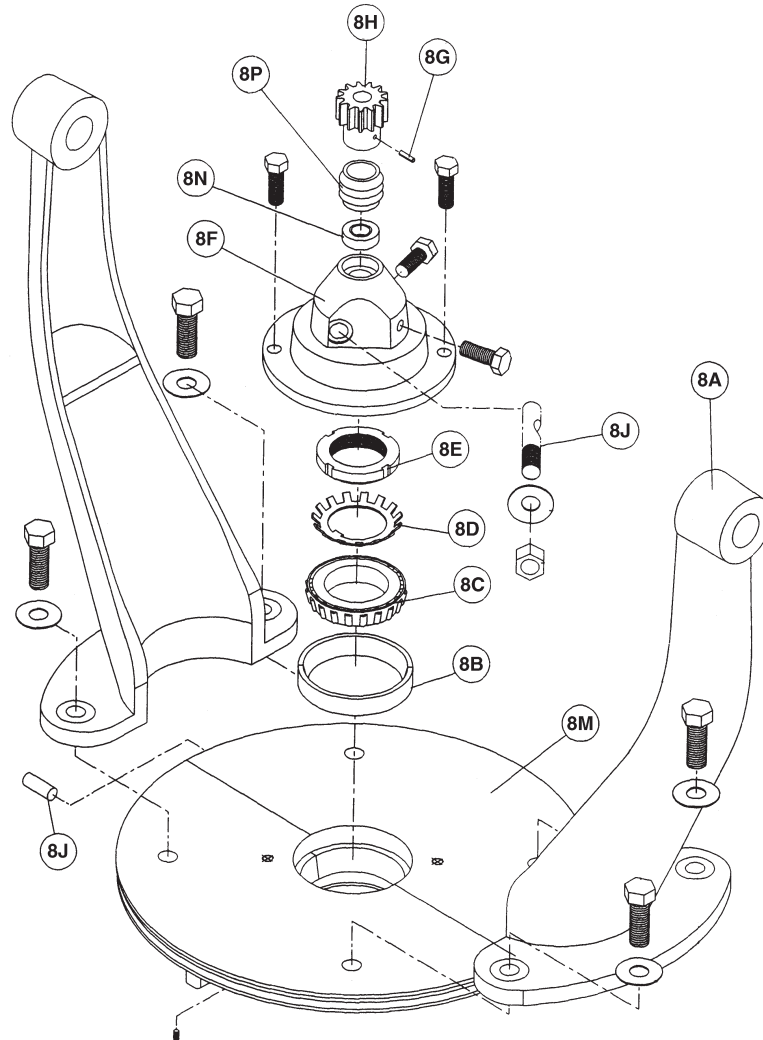
PERKO® *DEC Spare Parts - Section 7*
Upper Shroud Assembly (as shown)
Part No. 0855 0070



<i>Item No.</i>	<i>Description</i>	<i>Qty</i>	<i>PERKO Fig. No.</i>
7A	Locking Leaf, Right	1	0855 07A
7B	Locking Leaf, Left	1	0855 07B
7C	Cover Ring, Top	1	0855 07C

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.

PERKO® DEC Spare Parts - Section 8
Rotary Plate & Support Arms Assembly (as shown)
Part No. 0855 0080



<u>Item No.</u>	<u>Description</u>	<u>Qty</u>	<u>PERKO Fig. No.</u>
8A	Arm	2	9504 036
8B	Ring, Bearing	1	9506 011
8C	Bearing	1	9506 009
8D	Lock Ring	1	9506 007
8E	Threaded Ring	1	9506 005
8F	Housing, Bearing	1	9506 034
8G	Roll Pin - 1/8" x 1"	1	9551 093
8H	Pinion Gear	1	0855 08H
8J	Stud-Lock	1	9506 041
8M	Rotary Plate	1	0855 08M
8N	Oil Seal	1	9506 001
8P	Boot	1	0855 08P

Note: Common Screws, Nuts & Bolts Not Identified as Spare Parts.