

IRIDEONTM

***AR500*TM Exterior Wash Luminaire Service Supplement**

- Illustrated Parts Breakdown
- Electronics and Ballast Plate Assembly Drawings
- Early Production Luminaire Service Procedures
- Technical Bulletins

AR500™ Exterior Wash Luminaire

Illustrated Parts Breakdown

Reporting Errors and Recommending Improvements

You can improve this manual. If you find any mistakes, or if you know of a way to improve procedures, please let us know. Send your letter to:

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attn: Service Manager

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Canada Patents No. 2,070,670; 2,050,375; 1,259,058; 1,181,795;
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Europe Patents No. 0 547 732; 0 474 202; 0 192 882; 0 140 994;
Hong Kong Patent No. 965/1990;
Japan Patents No. 2,059,669; 2,055,324; 1,889,481; 1,533,011;
Korea Patent No. 76,310;
Mexico Patent No. 180,148;
Singapore Patent No. 663/90;
Spain Patents No. 2.031.748; 548.328;
U.K. Design Reg. No. 2056387; 2056386.

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Revision History

Basic	10 July 1996
Rev. A	29 August 1996
Rev. B	25 April 1997

Foreword

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Chapter 1 Stanchion Assemblies

1.1 Parts

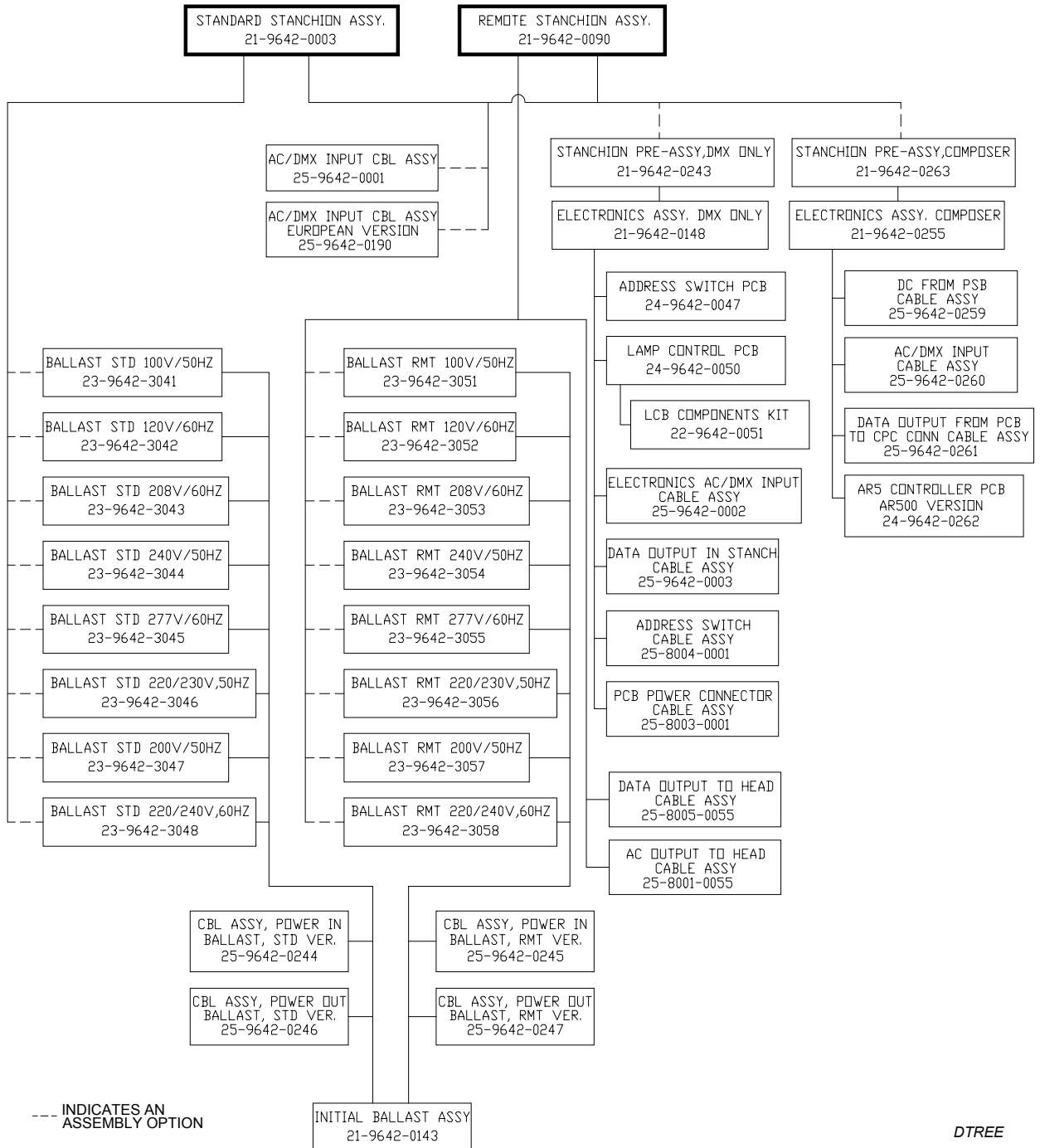


Figure 1-1 - Stanchion Assembly Drawing Tree

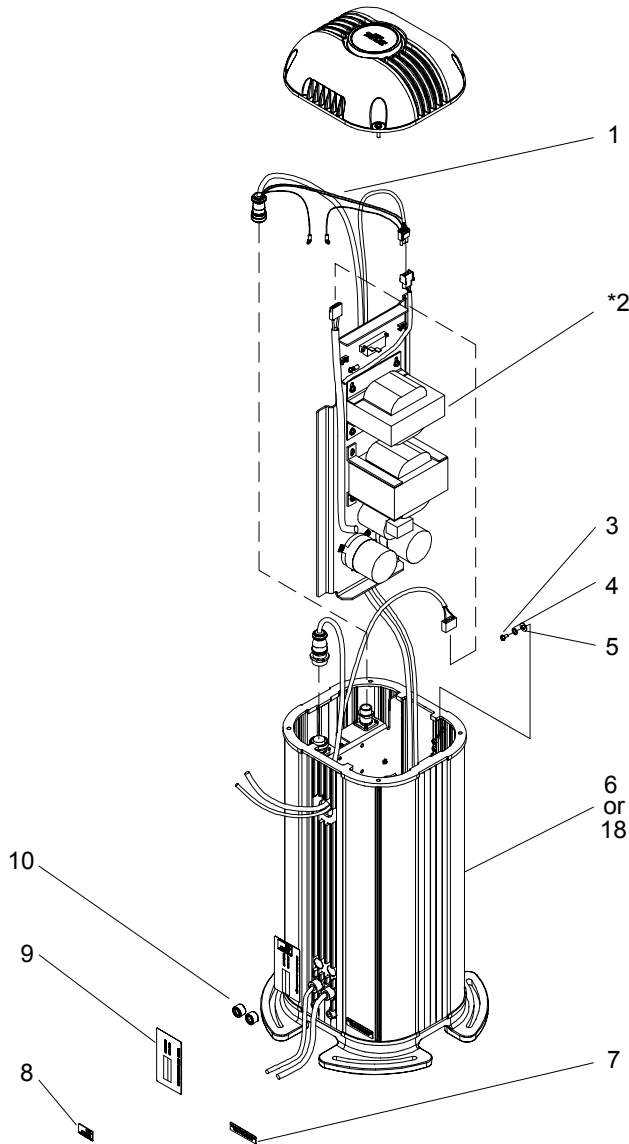
1.1.1 Stanchion Assembly, Standard Version 7091A2002

NO.	VER.	PART NO.	QTY	DESCRIPTION
1	01-03,05-08	7091B7001	1 EA	CABLE ASSY, UNIT AC/DMX INPUT
1	04	7091B7006	1 EA	CABLE ASSY, UNIT AC/DMX INPUT EURO VERSION
*2	01,09	7091B2001	1 EA	100V,50HZ, BALLAST ASSEMBLY, STD, AR500
*2	02,10	7091B2002	1 EA	120V,60HZ, BALLAST ASSEMBLY, STD, AR500
*2	03,11	7091B2003	1 EA	208V,60HZ, BALLAST ASSEMBLY, STD, AR500
*2	04,12	7091B2004	1 EA	240V,50HZ, BALLAST ASSEMBLY, STD, AR500
*2	05,13	7091B2005	1 EA	277V,60HZ, BALLAST ASSEMBLY, STD, AR500
*2	06,14	7091B2006	1 EA	220/230V,50HZ, BALLAST ASSEMBLY, STD, AR500
*2	07,15	7091B2007	1 EA	200V,50HZ, BALLAST ASSEMBLY, STD, AR500
*2	08,16	7091B2008	1 EA	220/240V,60HZ, BALLAST ASSEMBLY, STD, AR500
3	01-16	HW417	2 EA	SCREW, 10-32X3/8"PPSS
4	01-16	HW4137	2 EA	WASHER, SPLIT LOCKWASHER, #10SS
5	01-16	HW4141	2 EA	WASHER, FLAT, #10SS
6	01-08	7091A2017	1 EA	STANCHION PRE-ASSY, DMX ONLY, AR500
*7	01,09	7091A4009	1 EA	LABEL, AR500 INPUT 100 TAG
*7	02,10	7091A4002	1 EA	LABEL, AR500 INPUT 120 TAG
*7	03,07,11,15	7091A4010	1 EA	LABEL, AR500 INPUT 200/208 TAG
*7	04,06,08,12,14,16	7091A4011	1 EA	LABEL, AR500 INPUT 220/240 TAG
*7	05,13	7091A4012	1 EA	LABEL, AR500 INPUT 277 TAG
8	01-03, 05-11, 13-16	I231	1 EA	LABEL, AR500 UL (53118-23007)
9	01-16	7091A4001	1 EA	LABEL, AR500 ID TAG
10	01-16	HW6170	2 EA	HOLE PLUG, 1/2"NPT THRD .50L RECESS HEAD
NS	01-16	HW7103	4 EA	CABLE TIE, BLACK, .18X12"
11	04	HW2186	4 EA	SCREW, #6-32X3/8" PPSS
12	04	HW2218	4 EA	WASHER, #6, SPLIT LOCK, SS
13	04	HW2214	4 EA	WASHER, FLAT, #6SS
14	04	7091A3055	1 EA	ELECTRONIC COVER PLATE, AR500
15	04	HW7103	1 EA	CABLE TIE, BLACK, .18X12"
16	04	L2002	1 EA	EMI FERRITE CABLE CLAMP, 0.514 (LARGE)
17	04	L2001	1 EA	EMI FERRITE CABLE CLAMP, 0.4 (SMALL)
18	09-16	7091A2020	1 EA	STANCHION PRE-ASSY, COMPOSER CONTROL

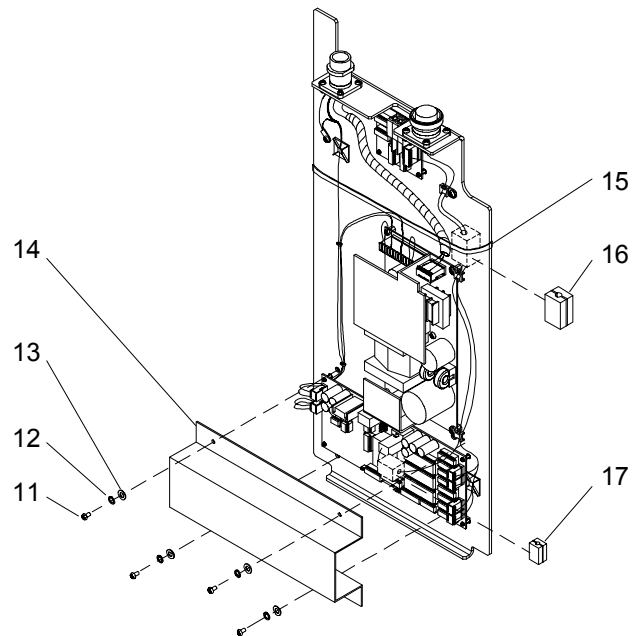
* - Version is dependent on incoming voltage.

NS - Item not shown.

1.1.1 Stanchion Assembly, Standard Version (Cont'd) 7091A2002



*VERSION TABLE	
VER.	DESCRIPTION
01	100V/50HZ CONFIG.,DMX ONLY
02	120V/60HZ CONFIG., DMX ONLY
03	208V/60HZ CONFIG., DMX ONLY
04	240V/50HZ CONFIG., DMX ONLY, EURO
05	277V/60HZ CONFIG., DMX ONLY
06	220/230V,50HZ CONFIG., DMX ONLY
07	200V/50HZ CONFIG., DMX ONLY
08	220/240V,60HZ CONFIG., DMX ONLY
09	100V/50HZ CONFIG., COMPOSER
10	120V/60HZ CONFIG., COMPOSER
11	208V/60HZ CONFIG., COMPOSER
12	240V/50HZ CONFIG.,COMPOSER,EURO
13	277V/60HZ CONFIG., COMPOSER
14	220/230V,50HZ CONFIG., COMPOSER
15	200V/50HZ CONFIG., COMPOSER
16	220/240V,60HZ CONFIG., COMPOSER



ELECTRONICS PLATE WITH EUROPEAN EMI MODIFICATIONS

* - Version is dependent on incoming voltage.

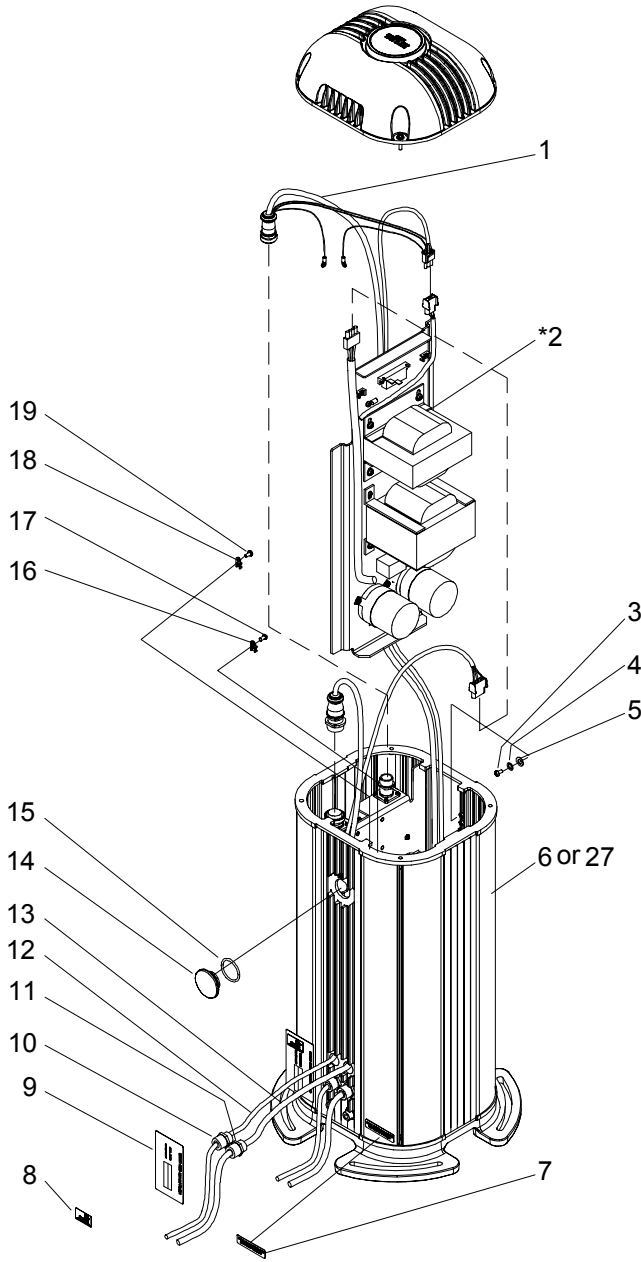
1-4 IRIDEON™ AR500™ EXTERIOR WASH LUMINAIRE ILLUSTRATED PARTS BREAKDOWN

**1.1.2 Stanchion Assembly, Remote Version
7091A2005-1**

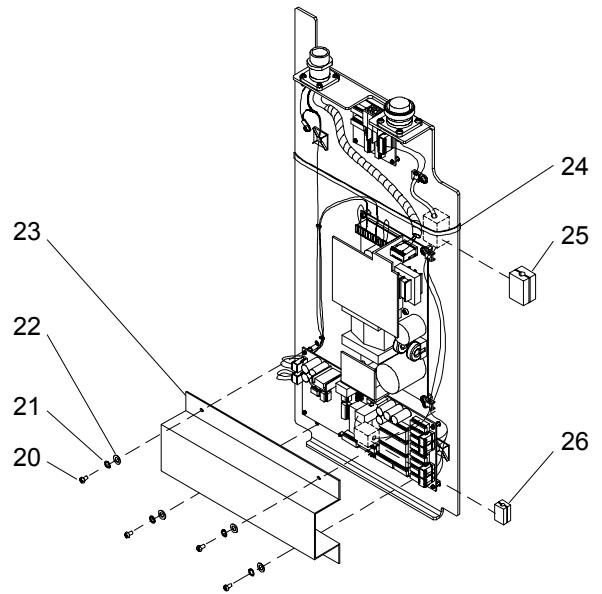
NO.	VER.	PART NO.	QTY	DESCRIPTION
1	01-03,05-11,13-19,21-27,29-32	7091B7001	1 EA	CABLE ASSY, UNIT AC/DMX INPUT
1	04,12,20,28	7091B7006	1 EA	CABLE ASSY, UNIT AC/DMX INPUT EURO VERSION
*2	01,09,17,25	7091B2009	1 EA	100V,50HZ, BALLAST ASSEMBLY, RMT, AR500
*2	02,10,18,26	7091B2010	1 EA	120V,60HZ, BALLAST ASSEMBLY, RMT, AR500
*2	03,11,19,27	7091B2011	1 EA	208V,60HZ, BALLAST ASSEMBLY, RMT, AR500
*2	04,12,20,28	7091B2012	1 EA	240V,50HZ, BALLAST ASSEMBLY, RMT, AR500
*2	05,13,21,29	7091B2013	1 EA	277V,60HZ, BALLAST ASSEMBLY, RMT, AR500
*2	06,14,22,30	7091B2014	1 EA	220/230V,50HZ, BALLAST ASSEMBLY, RMT, AR500
*2	07,15,23,31	7091B2015	1 EA	200V,50HZ, BALLAST ASSEMBLY, RMT, AR500
*2	08,16,24,32	7091B2016	1 EA	220/240V,60HZ, BALLAST ASSEMBLY, RMT, AR500
3	01-32	HW417	2 EA	SCREW, 10-32X3/8"PPSS
4	01-32	HW4137	2 EA	WASHER, SPLIT LOCKWASHER, #10SS
5	01-32	HW4141	2 EA	WASHER, FLAT, #10SS
6	01-16	7091A2017	1 EA	STANCHION PRE-ASSY, DMX ONLY, AR500
*7	01,09,17,25	7091A4009	1 EA	LABEL, AR500 INPUT 100 TAG
*7	02,10,18,26	7091A4002	1 EA	LABEL, AR500 INPUT 120 TAG
*7	03,07,11,15	7091A4010	1 EA	LABEL, AR500 INPUT 200/208 TAG
*7	04,06,08,12,14,16,20,22,24,28,30,32	7091A4011	1 EA	LABEL, AR500 INPUT 220/240 TAG
*7	05,13,21,29	7091A4012	1 EA	LABEL, AR500 INPUT 277 TAG
8	01-03,05-11,13-32	I231	1 EA	LABEL, AR500 UL (53118-23007)
9	01-32	7091A4001	1 EA	LABEL, AR500 ID TAG
10	01-32	J297	2 EA	CONNECTOR, CORD, HUBBELL #1017
11	01-08,17-24	7090B7001-01	1 EA	CABLE ASSEMBLY, AC OUTPUT, AR500, 55FT
11	09-16,25-32	7090B7001-02	1 EA	CABLE ASSEMBLY, AC OUTPUT, AR500, 105FT
12	01-08,17-24	7090B7004-01	1 EA	CABLE ASSY, DATA OUTPUT TO HEAD, 55FT
12	09-16,25-32	7090B7004-02	1 EA	CABLE ASSY, DATA OUTPUT TO HEAD, 105FT
13	01-32	J296	2 EA	CONNECTOR, CORD, HUBBELL #1016
14	01-32	7091A4087	1 EA	HOLE PLUG, AR500 REMOTE
15	01-32	HW6177	1 EA	O'RING, SILICONE 60 DURO 5/8"OD X 3/8"ID
16	01-32	HW7105	1 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
17	01-32	HW4130	1 EA	SCREW, 10-32X3/8"PPSS SEF-TAP, TYPE F
18	01-32	HW7105	1 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
19	01-32	HW4130	1 EA	SCREW, 10-32X3/8"PPSS SEF-TAP, TYPE F
NS	01-32	HW7103	6 EA	CABLE TIE, BLACK, .18X12"
20	04,12	HW2186	4 EA	SCREW, #6-32X3/8"PPSS
21	04,12	HW2218	4 EA	WASHER, SPLIT LOCK, #6SS
22	04,12	HW2214	4 EA	WASHER, FLAT, #6SS
23	04,12	7091A3055	1 EA	ELECTRONIC PLATE EMI SHIELD, AR500
24	04,12	HW7103	1 EA	CABLE TIE, BLACK, .18X12"
25	04,12	L2002	1 EA	EMI FERRITE CABLE CLAMP, 0.514 (LARGE)
26	04,12	L2001	1 EA	EMI FERRITE CABLE CLAMP, 0.4 (SMALL)
27	17-32	7091A2020	1 EA	STANCHION PRE-ASSY, COMPOSER CONTROLLER

* - Version is dependent on incoming voltage. NS - Item not shown.

1.1.2 Stanchion Assembly, Remote Version (Cont'd) 7091A2005



*VERSION TABLE	
VER.	DESCRIPTION
01	100V/50HZ CONFIG., 55FT., DMX ONLY
02	120V/60HZ CONFIG., 55FT., DMX ONLY
03	208V/60HZ CONFIG., 55FT., DMX ONLY
04	240V/50HZ CONFIG., 55FT., EURO, DMX ONLY
05	277V/60HZ CONFIG., 55FT., DMX ONLY
06	220/230V, 50HZ CONFIG., 55FT., DMX ONLY
07	200V/50HZ CONFIG., 55FT., DMX ONLY
08	220/240V, 60HZ CONFIG., 55FT., DMX ONLY
09	100V/50HZ CONFIG., 105FT., DMX ONLY
10	120V/60HZ CONFIG., 105FT., DMX ONLY
11	208V/60HZ CONFIG., 105FT., DMX ONLY
12	240V/50HZ CONFIG., 105FT., EURO, DMX ONLY
13	277V/60HZ CONFIG., 105FT., DMX ONLY
14	220/230V, 50HZ CONFIG., 105FT., DMX ONLY
15	200V/50HZ CONFIG., 105FT., DMX ONLY
16	220/240V, 60HZ CONFIG., 105FT., DMX ONLY
17	100V/50HZ CONFIG., 55FT., COMPOSER
18	120V/60HZ CONFIG., 55FT., COMPOSER
19	208V/60HZ CONFIG., 55FT., COMPOSER
20	240V/50HZ CONFIG., 55FT., EURO, COMPOSER
21	277V/60HZ CONFIG., 55FT., COMPOSER
22	220/230V, 50HZ CONFIG., 55FT., COMPOSER
23	200V/50HZ CONFIG., 55FT., COMPOSER
24	220/240V, 60HZ CONFIG., 55FT., COMPOSER
25	100V/50HZ CONFIG., 105FT., COMPOSER
26	120V/60HZ CONFIG., 105FT., COMPOSER
27	208V/60HZ CONFIG., 105FT., COMPOSER
28	240V/50HZ CONFIG., 105FT., EURO, COMPOSER
29	277V/60HZ CONFIG., 105FT., COMPOSER
30	220/230V, 50HZ CONFIG., 105FT., COMPOSER
31	200V/50HZ CONFIG., 105FT., COMPOSER
32	220/240V, 60HZ CONFIG., 105FT., COMPOSER



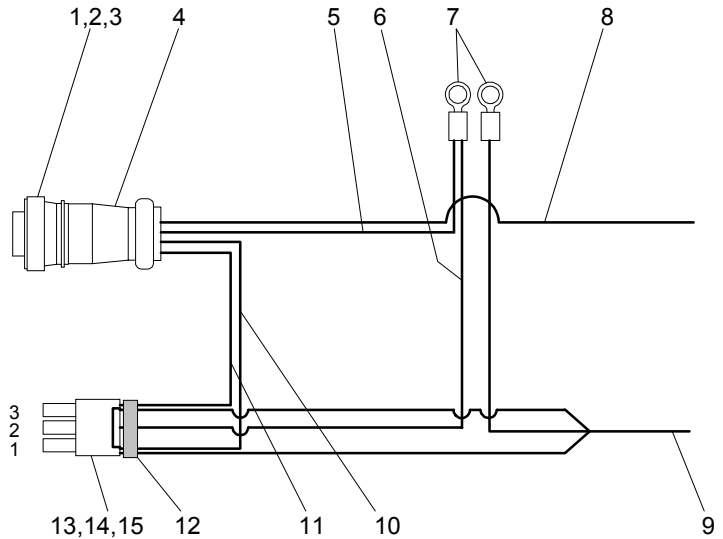
ELECTRONICS PLATE WITH EUROPEAN EMI MODIFICATIONS

* - Version is dependent on incoming voltage.

**1.1.3 Unit AC/DMX Input Cable Assembly
7091B7001**

NO.	PART NO.	QTY	DESCRIPTION
1	J770	1 EA	PLUG, 9 POS FEMALE LAMP
2	J6567	3 EA	CONTACT SOCKET, TIN, 18-16AWG TYPE 3+
3	J6570	2 EA	CONTACT SOCKET, GLD 22AWG, TYPE 3+
4	J6483	1 EA	CLAMP, 9POS LAMP, BACKSHELL
5	W366	10 IN	WIRE, 18AWG, 600V, 105°C PVG GRN UL1015
6	W438	10 IN	WIRE, 16 AWG, 600V, 105°C
7	J4213	2 EA	TERM, RING, #10, 16-14AWG
8	W6133	15 FT	CABLE, 22AWG, 2 SHIELDED PAIR
9	W6131	15 FT	CABLE, 16AWG, 300V, 3 COND, SJOW-A
10	W369	12 IN	WIRE, 18AWG, 600V, 105°C PVG BLK UL1015
11	W368	12 IN	WIRE, 18AWG, 600V, 105°C PVG WHT UL1015
12	W6128	1.5 IN	HEAT SHRINK, BLACK 1/4"
13	J6479	1 EA	PLUG HOUSING, MNLOK PLUG 3 POS
14	J6496	2 EA	CONTACT SOCKET, MNLOK, 12-10AWG, LOOSE
15	J6571	1 EA	CONTACT SOCKET, 20AWG, TIN, MNLOK

POSITION	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	GREEN	GROUND	5	2
2	GRN&BLK	DATA	8	3
3	WHT&RED	DATA	8	3
7	WHITE	AC/NEUT	11	2
9	BLACK	AC/LINE	10	2



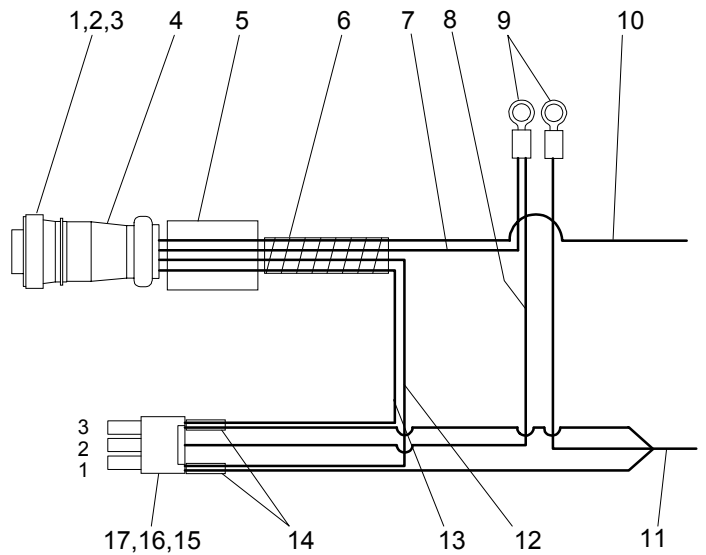
POSITION	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	BLACK	AC/LINE	9	14
1	BLACK	AC/LINE	10	14
2	GREEN	GROUND	6	15
3	WHITE	AC/NEUTRAL	9	14
3	WHITE	AC/NEUTRAL	11	14

1.1.4 Unit AC/DMX Input Cable Assy, European Version 7091B7006

NO.	PART NO.	QTY	DESCRIPTION
1	J770	1 EA	PLUG, 9 POS FEMALE LAMP
2	J6567	3 EA	CONTACT SOCKET, TIN, 18-16AWG TYPE 3+
3	J6570	2 EA	CONTACT SOCKET, GLD 22AWG, TYPE 3+
4	J6483	1 EA	CLAMP, 9POS LAMP, BACKSHELL
5	L2002	1 EA	CLAMP, EMI SUP. FERRITE, 0.514 (LARGE)
6	HW6164	12 IN	SPIRAL WRAP, 1/2" TEFLON
7	W366	10 IN	WIRE, 18AWG, 600V, 105°C PVG GRN UL1015
8	W438	10 IN	WIRE, 16 AWG, 600V, 105°C
9	J4213	2 EA	TERM, RING, #10, 16-14AWG
10	W6133	15 FT	CABLE, 22AWG, 2 SHIELDED PAIR
11	W6139	15 FT	CABLE, 16AWG, 300V, 3 COND, SJOW-A
12	W369	12 IN	WIRE, 18AWG, 600V, 105°C PVG BLK UL1015
13	W368	12 IN	WIRE, 18AWG, 600V, 105°C PVG WHT UL1015
14	W6128	1.5 IN	HEAT SHRINK, BLACK 1/4"
15	J6479	1 EA	PLUG HOUSING, MNLOK PLUG 3 POS
16	J6496	2 EA	CONTACT SOCKET, MNLOK, 12-10AWG, LOOSE
17	J6571	1 EA	CONTACT SOCKET, 20AWG, TIN, MNLOK

POSITION	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	GREEN	GROUND	7	2
2	GRN&BLK	DATA	10	3
3	WHT&RED	DATA	10	3
7	WHITE	AC/NEUT	13	2
9	BLACK	AC/LINE	12	2

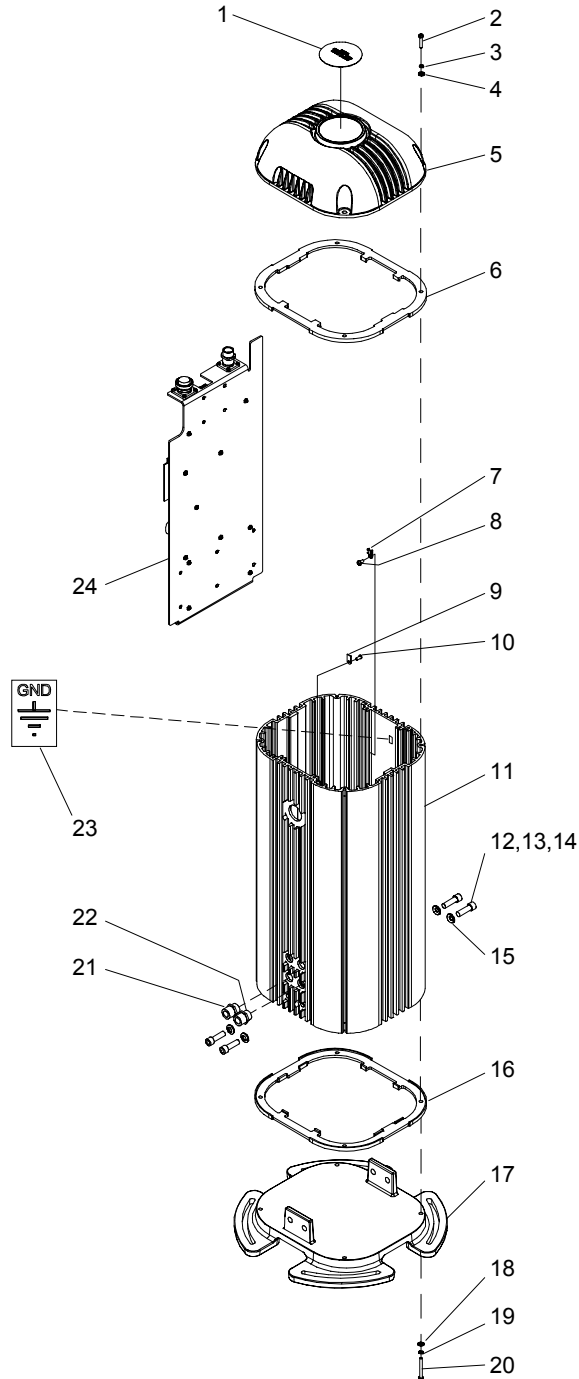
POSITION	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	BROWN	AC/LINE	11	16
1	BLACK	AC/LINE	12	16
2	GRN&YEL	GROUND	8	17
3	BLUE	AC/NEUTRAL	11	16
3	WHITE	AC/NEUTRAL	13	16



**1.1.5 Stanchion Pre-Assembly, DMX Only
7091A2017**

NO.	PART NO.	QTY	DESCRIPTION
1	7091A4006	1 EA	LABEL, AR500 SERVICING, GRAY
2	HW4126	4 EA	SCREW, #10-32 X 1"PPSS
3	HW4137	4 EA	WASHER, SPLIT LOCKWASHER, #10SS
4	HW4141	4 EA	WASHER, FLAT, #10SS
5	7091A3001	1 EA	STANCHION CAP CASTING, AR500
6	7091A4089	1 EA	STANCHION MOLDED GASKET, AR500
7	HW7105	3 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
8	HW4130	3 EA	SCREW, 10-32X3/8"PPSS SEF-TAP, TYPE F
9	HW7105	1 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
10	HW4130	1 EA	SCREW, 10-32X3/8"PPSS SEF-TAP, TYPE F
11	7091A2046	1 EA	STANCHION SIDES, UNIVERSAL, AR500
12	HW5244	4 EA	SCREW, 3/8-16X1-1/4"SCSS, 316
13	HW5241	4 EA	WASHER, FLAT, 3/8SS AN960-C616
14	HW5237	4 EA	NUT, 3/8-16, LOCK, SS
15	HW5253	4 EA	WASHER, 3/8" SEALING BONDED NEOPRENE SS
16	7091A4089	1 EA	STANCHION MOLDED GASKET, AR500
17	7091A3031	1 EA	STANCHION BASE CASTING, AR500
18	HW4141	4 EA	WASHER, FLAT, #10SS
19	HW4137	4 EA	WASHER, SPLIT LOCKWASHER, #10SS
20	HW4125	4 EA	SCREW, #10-32X1-3/4"PPSS
21	J296	1 EA	CONNECTOR, CORD, HUBBELL #1016
22	J297	1 EA	CONNECTOR, CORD, HUBBELL #1017
23	7090A4017	1 EA	MARKER, WIRE GND SYMBL, VYNL
24	7091A2013	1 EA	ELECTRONICS ASSEMBLY, STANCHION, DMX ONLY

1.1.5 Stanchion Pre-Assembly, DMX Only(Cont'd) 7091A2017



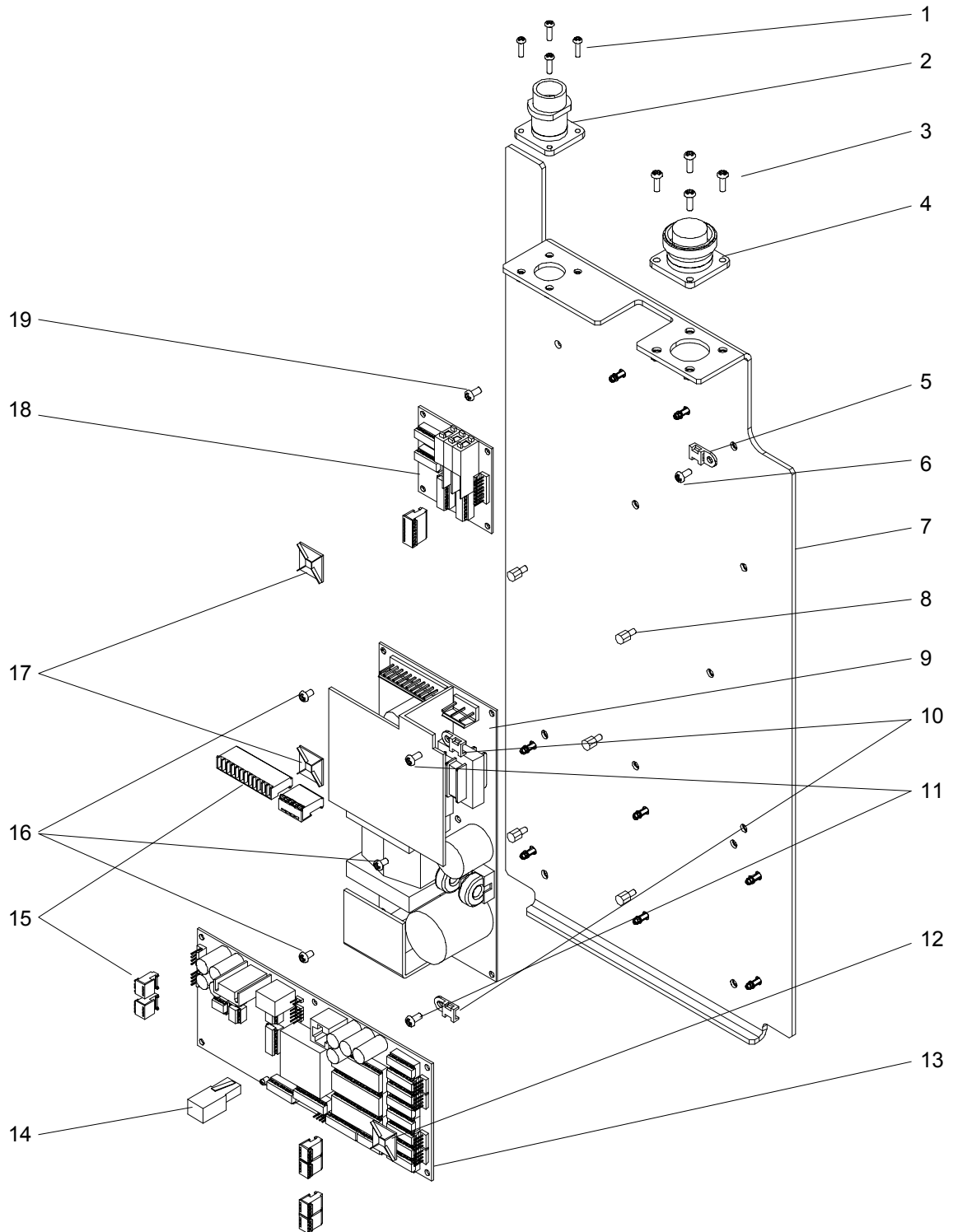
**1.1.6 Stanchion Electronics Assembly
21-9642-0148**

NO.	PART NO.	QTY	DESCRIPTION
1	HW1147	4 EA	SCREW, 4-40X7/16"PPSS
2	7091B7002	1 EA	CABLE ASSY, ELECTRONICS AC/DMX INPUT
3	HW2187	4 EA	SCREW, 6-32X7/16"PPSS
4	7091B7003	1 EA	CABLE ASSY, DATA OUTPUT IN STANCHION
5	HW7105	1 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
6	HW2185	1 EA	SCREW, 6-32X5/16"PPSS
7	7091A3046	1 EA	PLATE, MOUNTING, ELECTRONICS
8	HW9211	5 EA	STANDOFF, 1/4" HEX 6-32X1/4" SSMF
9	PS141	1 EA	POWER SUPPLY, 100 WATT, 24VDC, SWITCHING
10	HW7105	2 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
11	HW2185	2 EA	SCREW, 6-32X5/16"PPSS
*12	HW7109	1 EA	SADDLE, CABLE, ADHESIVE BACKED
13	7091B5002	1 EA	PCB ASSY, AR500 LAMP CONTROL
14	7090B7003	1 EA	CABLE ASSY, ADDRESS SWITCH
15	7090B7002	1 EA	CABLE ASSY, PCB POWER CONNECTOR
16	HW2116	3 EA	SCREW, 6-32X1/4"PPSS
17	HW7109	2 EA	SADDLE, CABLE, ADHESIVE BACKED
18	7091B5001	1 EA	PCB ASSY, ADDRESS SWITCH, AR500
19	HW2185	1 EA	SCREW, 6-32X5/16"PPSS
*20	HW7102	12 EA	CABLE TIE, SMALL 0.14X4"
NS	HW6165	12 IN	SPIRAL WRAP, 3/8"

* - Use cable ties to secure cable assemblies to #17 saddles.

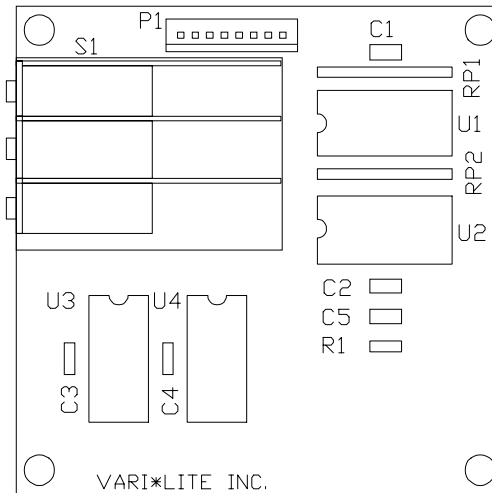
NS - Not shown. Installed on incoming power wires.

1.1.6 Stanchion Electronics Assembly (Cont'd) 7091A2013



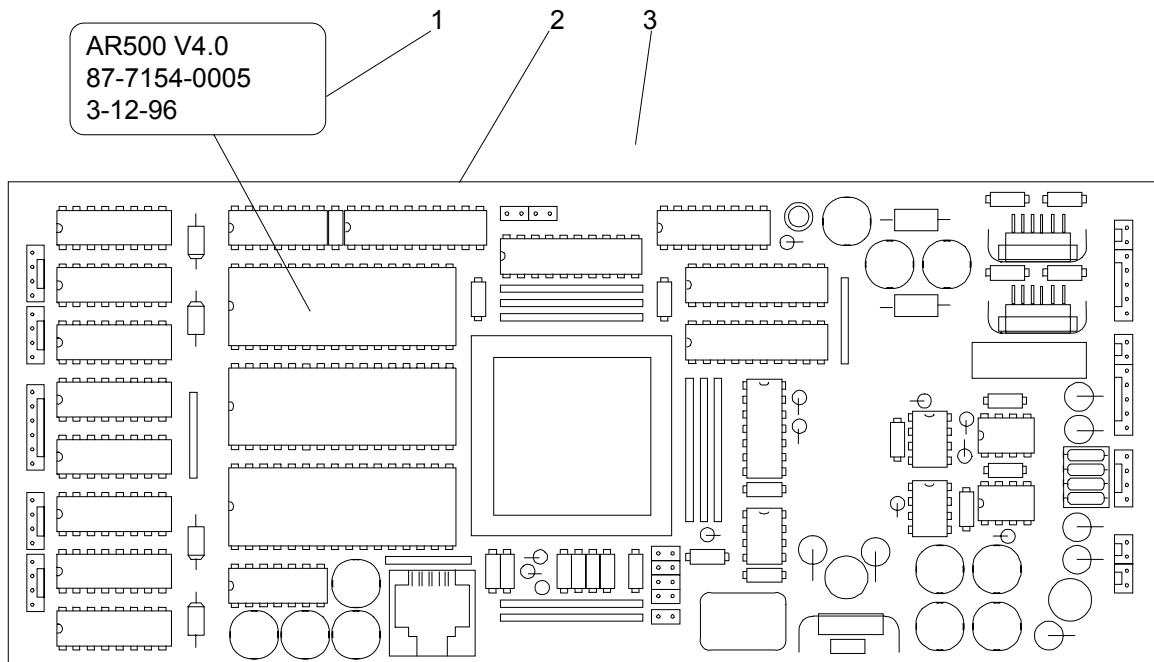
**1.1.7 Address Switch PCB Assembly
7091B5001**

NO.	PART NO.	QTY	REF DES	DESCRIPTION
1	7091B4001	1 EA		PCB, ADDRESS SWITCH, AR500
2	J3299	2 EA	U3,U4	SOCKET, 14PIN DIP
3	J3300	2 EA	U1,U2	SOCKET, 16PIN DIP
4	J6490	1 EA	P1	HEADER, MTA FRCT LOK STRT POST 8PIN
5	R446	1 EA	R1	RES, 1/4W 5% 100K CF
6	R479	2 EA	RP1,RP2	RES SIP, 103 8PIN BUSSED LW PROFILE
7	C270	4 EA	C1-C4	CAP, 0.1UF, 50V, SIP CERAMIC, 0,100", 20%
8	C281	1 EA	C5	CAP, 0.1UF, 50V, SIP, CERAMIC, 0,100", 10%
9	S309	3 EA	S1	SWITCH, SUBMINI P-WHL RT ANGLE
10	Z654	1 EA	C3	IC, 74HC74 DUAL D FLIP FLOP
11	Z656	1 EA	C4	IC, 74HC132, QUAD 2-INPUT NAND SCHMT TRGR
12	Z673	2 EA	C1,C2	IC, 74HC165, 8-BIT PARALLEL-IN



1.1.8 Lamp Control PCB Assembly 7092B5002

NO.	PART NO.	QTY	DESCRIPTION
1	7091A4007	1 EA	LABEL, EPROM COPYRIGHT, AR500
2	7090B4001	1 EA	PCB, VL5
3	7091A2030	1 EA	KIT, COMPONENTS, AR500 LAMP CTRL PCB ASSY



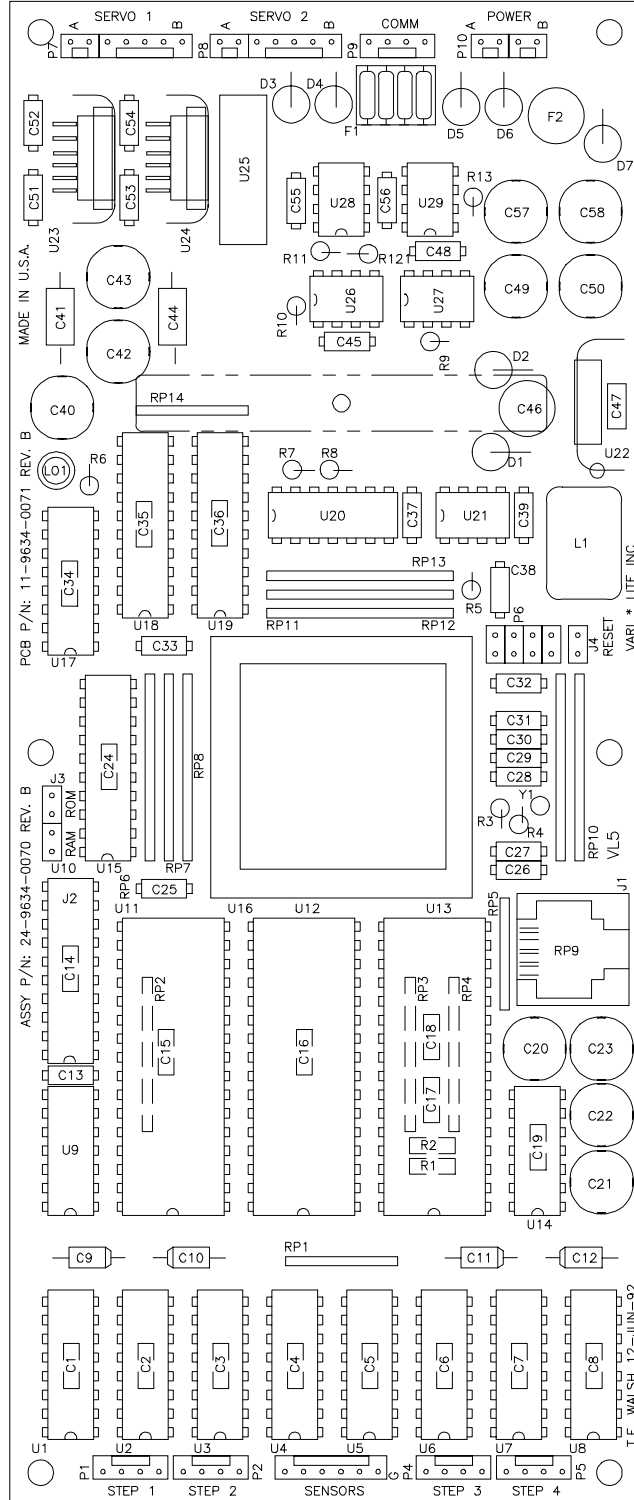
**1.1.9 Lamp Control PCB Components Kit
22-9642-0051**

PART NO.	QTY	REF DES	DESCRIPTION
J3298	6 EA	XU21, 26-29, XF1	SOCKET, 8PIN DIP
J3299	2 EA	XU9, 20	SOCKET, 14PIN DIP
J3301	3 EA	XU11-13	SOCKET, 32PIN DIP
HS124	1 EA	U22	HEATSINK, 7128D, TO-220
J3304	1 EA	P6	TERM STRIP, TSW, 4PIN, D-ROW
J3305	1 EA	U 16	SOCKET, 132PIN, PQFP, PGA, ADVANCED INTRCON
J3306	1 EA	U16	COVER, SOCKET, 132POS, PQFP, 821942-1
J3307	1 EA	XU16	SOCKET, 132POS, PQFP, #821949-5
J3308	9 EA	XU1-8, 17	SOCKET, 16PIN, DIP, TINNED
J3309	2 EA	XU10, 15	SOCKET, 20PIN, DIP, TINNED
J6488	6 EA	P1, 2, 4, 5, 9	HEADER, MTA FRCT LOK STRT POST 4PIN
J6491	2 EA	P10A, P10B	HEADER, MTA FRCT LOK STRT POST 2PIN
J6512	1 EA	AF1	PLUG, ADAPTER, 8PIN, LCP, SAMTEC
J3318	3 EA	J2-J4	TERM STRIP, 2-PIN STRAIGHT GOLD CONTACT
J6582	1 EA	J1	JACK, MODULAR, 8PIN STRAIGHT
R413	2 EA	R7, 8	RES, 1/4W 5% 2.7K
R432	4 EA	R5, 6, 10, 13	RES, 1/4W 5% 1K CF
R442	1 EA	R1	RES, 1/4W 5% 470 CF
R445	1 EA	R2	RES, 1/4W 5% 560 OHMS CF
R452	2 EA	R8, 12	RES, 1/4W 5% 330 CF
R453	1 EA	R3	RES, 1/4W 5% 330K CF
R469	1 EA	R4	RES, 1/4W 5% 20M
R477	1 EA	RP5	RES SIP, 472 6PIN BUSSED LW PROFILE
R478	11 EA	RP2-4, 6-13	RES SIP, 103 10PIN BUSSED
C268	30 EA	C1-8, 13-19, 24-26, 28-34, 37, 38, 45, 47, 48, 55, 56	CAP, .1UF, 50V, AXL, CERAMIC, .100", 20%
C271	2 EA	C27, 28	CAP, 20PF, 50V, SIP, CERAMIC, .100", 5%
C278	4 EA	C9-12	CAP, 10UF, 35V, RAD, ALUMINUM
C281	1 EA	C29	CAP, .1UF, 50V, SIP, CERAMIC, .100", 10%
C297	1 EA	C46	CAP, 470UF, 10V, RAD, ALUMINUM
C298	8 EA	C20-23, 49, 50, 57	CAP, 470UF, 35V, RAD, ALUMINUM
Y160	1 EA	Y1	CRYSTAL, 32.768 KHZ
L173	1 EA	L1	INDUCTOR, 680UF, PULSE #PE52649
7090B2002	1 EA	F1	ASSY, 1/16A DATA FUSE
F171	1 EA	F2	FUSE, 5AMP, 19374K, TR5-T TIME LAG
X164	1 EA	XF2	FUSEHOLDER, TR5, 19560
CR251	1 EA	D2	DIODE, RECTIFIER, 1N5401 100V 3A
CR255	1 EA	D1	DIODE, SCHOTTKY, 1N5822 40V 3A
CR257	4 EA	D3-6	DIODE, ZENER TS, 1N5908 5V 5W

1.1.9 Lamp Control PCB Components Kit (Cont'd) 7091A2030

PART NO.	QTY	REF DES	DESCRIPTION
CR261	1 EA	D7	DIODE, ZENER, 1N6281 27V 1500W 10%
Z635	2 EA	U26, 27	IC, 6N137, OPTOCOUPLER
Z642	4 EA	U2, 3, 6, 7	IC, L293D, QUAD HALF-BRIDGE DRIVER
Z643	1 EA	U22	IC, LM2575T-5.0, VOLTAGE REG., SWITCHING
Z647	1 EA	U16	IC, 68332, MICROPROCESSOR
Z653	1 EA	U20	IC, 74HC05 HEX INVERTER W/OPEN COLLECTOR
Z657	2 EA	U28, 29	IC, LTC485, RS422/RS485 TRANSCEIVER
Z669	1 EA	U9	IC, 74HC32, QUAD 2-INPUT OR GATE
Z670	2 EA	U12, 13	IC, 581001-70, 128K X 8, S-RAM, 70SPEED
Z671	5 EA	U1, 4, 5, 8, 17	IC, 74HC174 HEX D-FF W/CLR
Z672	1 EA	U25	IC, HPR100, DC TO DC CONVERTER, 5V IN/OUT
Z676	1 EA	U21	IC, MAX701, PWR SUPPLY MONITOR
Z685	1 EA	U15	IC, LOGIC PGM: VL5 U15 2614
Z686	1 EA	U10	IC, LOGIC PGM: VL5 U10 2624
Z688	1 EA	U11	EPROM, (PGMD27C010A-10/AR500 v4.0 3-12-96
CR278	1 EA		LED, RED HP

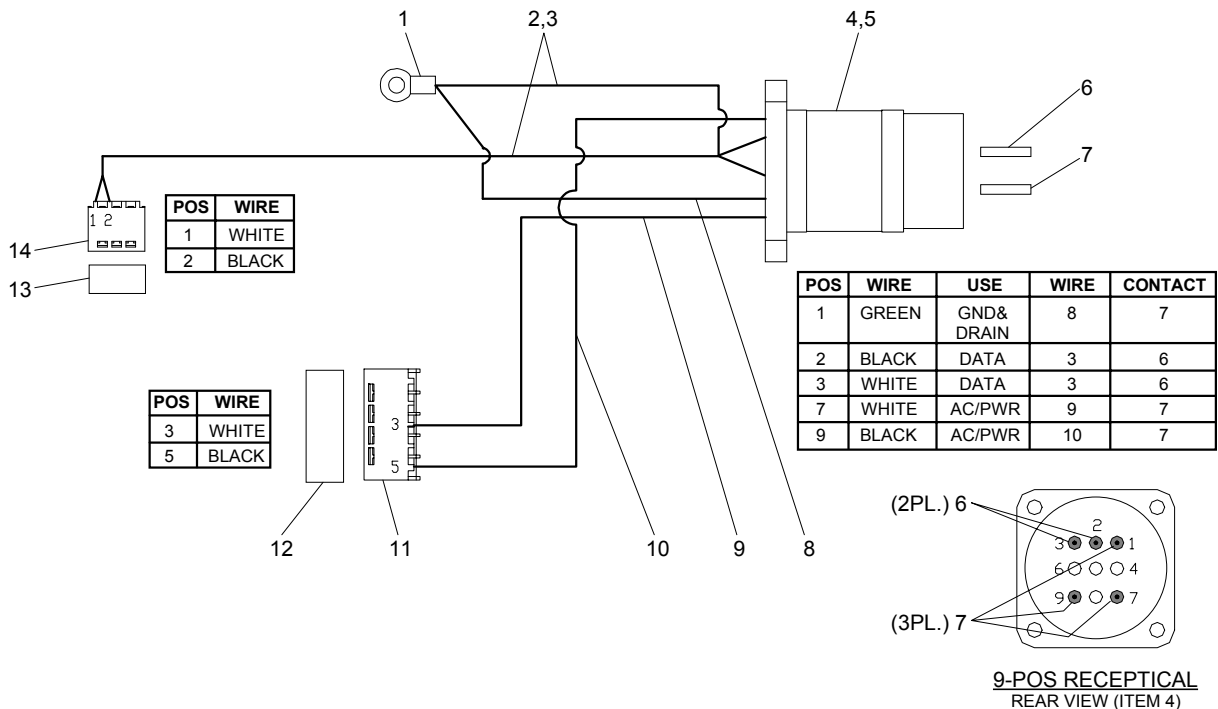
1.1.9 Lamp Control PCB Components Kit (Cont'd) 7091B2030



1.1.10 Electronics AC/DMX Input Cable Assembly 7091B7002 (REV. D - 1/25/96)

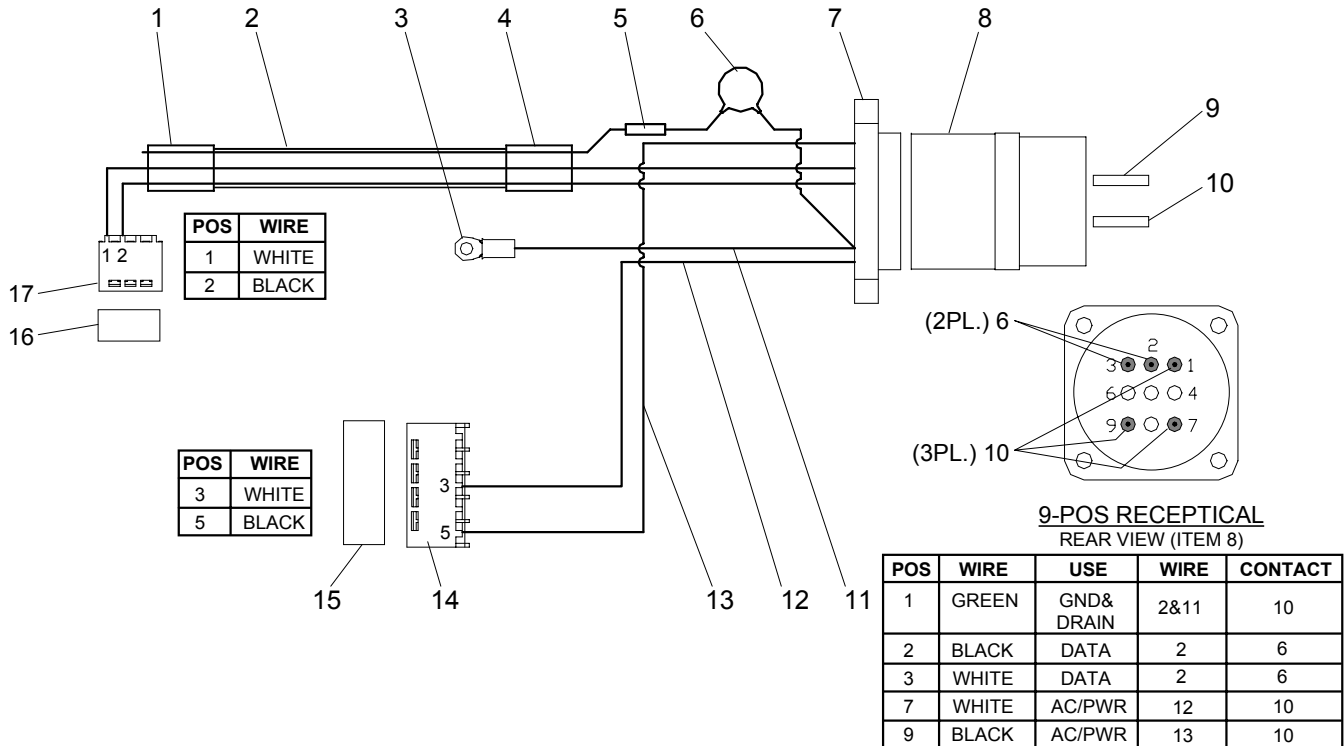
Note: See section 1.1.11 for Rev. E.

NO.	PART NO.	QTY	DESCRIPTION
1	J4219	1 EA	TERM, RING, #10 22-16AWG (TAPE)
2	W274	18 IN	CBL, 22AWG, STRND, 4 COND POLYPR INSUL
3	W6128	3 IN	HEAT SHRINK, BLACK, 1/4"
4	J6482	1 EA	RECEPT, 9 POSITION MALE
5	J769	1 EA	FLANGE, 9 POSITION CONNECTOR MOUNTING
6	J6576	2 EA	CONTACT PIN, 22AWG, GOLD TYPE 3+
7	J6575	3 EA	CONTACT PIN, TIN 18-16AWG TYPE 3+
8	W343	4 IN	WIRE, 18AWG, 300V, 80°C, PVC, GRN, UL1061
9	W345	12 IN	WIRE, 18AWG, 300V, 80°C, PVC, WHT, UL1061
10	W348	12 IN	WIRE, 18AWG, 300V, 80°C, PVC, BLK, UL1061
11	J6514	1 EA	CONN, IDC, MTA156, 5 POS, 18 AWG
12	J6519	1 EA	COVER, STRAIN RELIEF, 5 POS, MTA156
13	J6510	1 EA	COVER, STRAIN RELIEF, 4 POS MTA
14	J6500	1 EA	RECEPT, MTA100 W/TAB RED, 4 POSITION



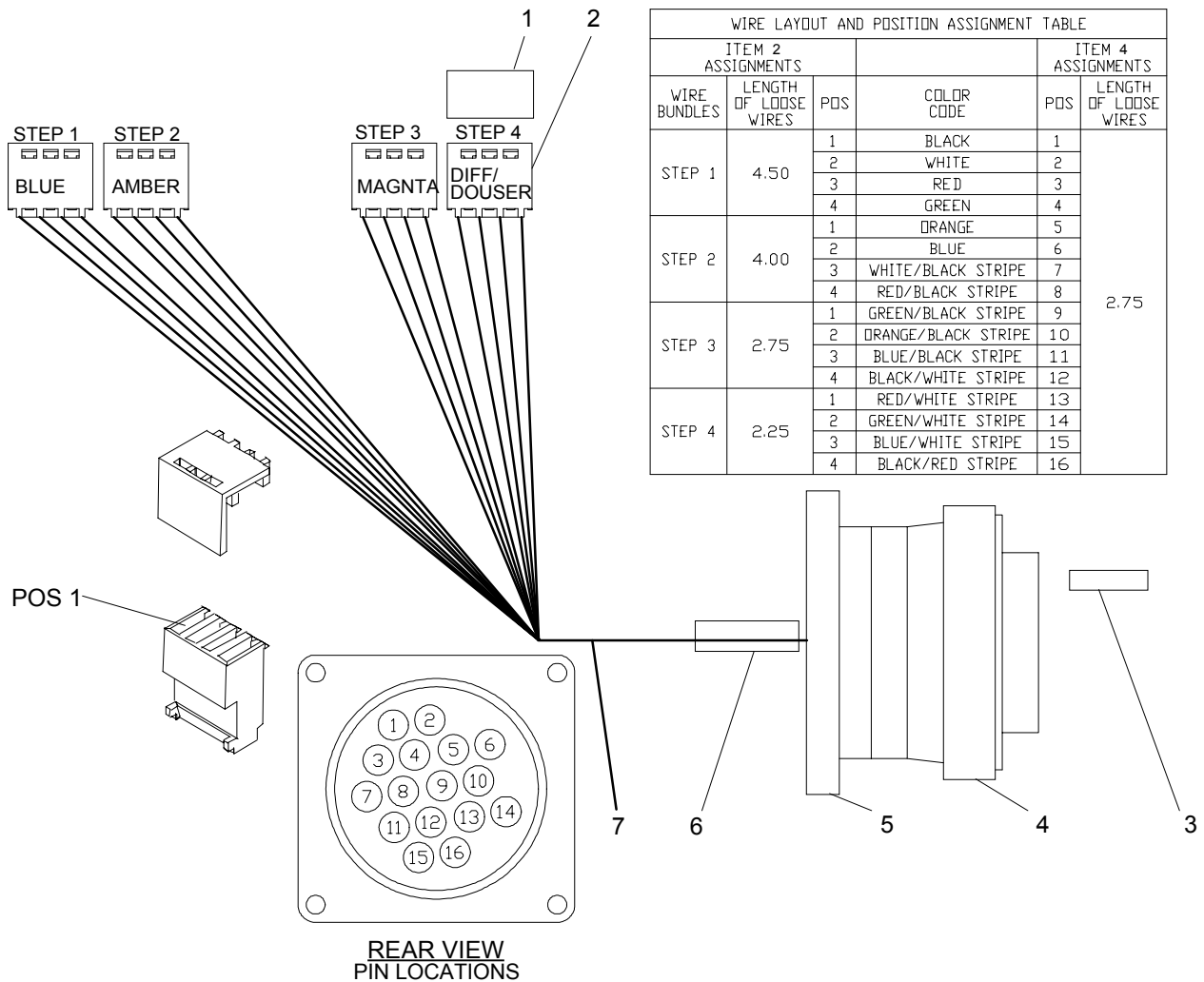
**1.1.11 Electronics AC/DMX Input Cable Assembly
7091B7002 (REV. E - 10/14/96)**

NO.	PART NO.	QTY	DESCRIPTION
1	W6128	1.5 IN	HEAT SHRINK, BLACK, 1/4"
2	W274	18 IN	CBL, 22AWG, STRND, 4 COND POLYPR INSUL
3	J4210	1 EA	TERM, RING, #6 22-16AWG (TAPE)
4	W6128	1.5 IN	HEAT SHRINK, BLACK, 1/4"
5	J4224	1 EA	BUTT SPLICE, INSULATED 22-18AWG
6	C303	1 EA	CAP, .01 uF 1000V RAD CER DISC
7	J769	1 EA	FLANGE, 9 POSITION CONNECTOR MOUNTING
8	J6482	1 EA	RECEPT, 9 POSITION MALE
9	J6576	2 EA	CONTACT PIN, 22AWG, GOLD TYPE 3+
10	J6575	3 EA	CONTACT PIN, TIN 18-16AWG TYPE 3+
11	W343	4 IN	WIRE, 18AWG, 300V, 80°C, PVC, GRN, UL1061
12	W347	12 IN	WIRE, 18AWG, 300V, 80°C, PVC, WHT, UL1061
13	W348	12 IN	WIRE, 18AWG, 300V, 80°C, PVC, BLK, UL1061
14	J6514	1 EA	CONN, IDC, MTA156, 5 POS, 18 AWG
15	J6519	1 EA	COVER, STRAIN RELIEF, 5 POS, MTA156
16	J6510	1 EA	COVER, STRAIN RELIEF, 4 POS MTA
17	J6500	1 EA	RECEPT, MTA100 W/TAB RED, 4 POSITION



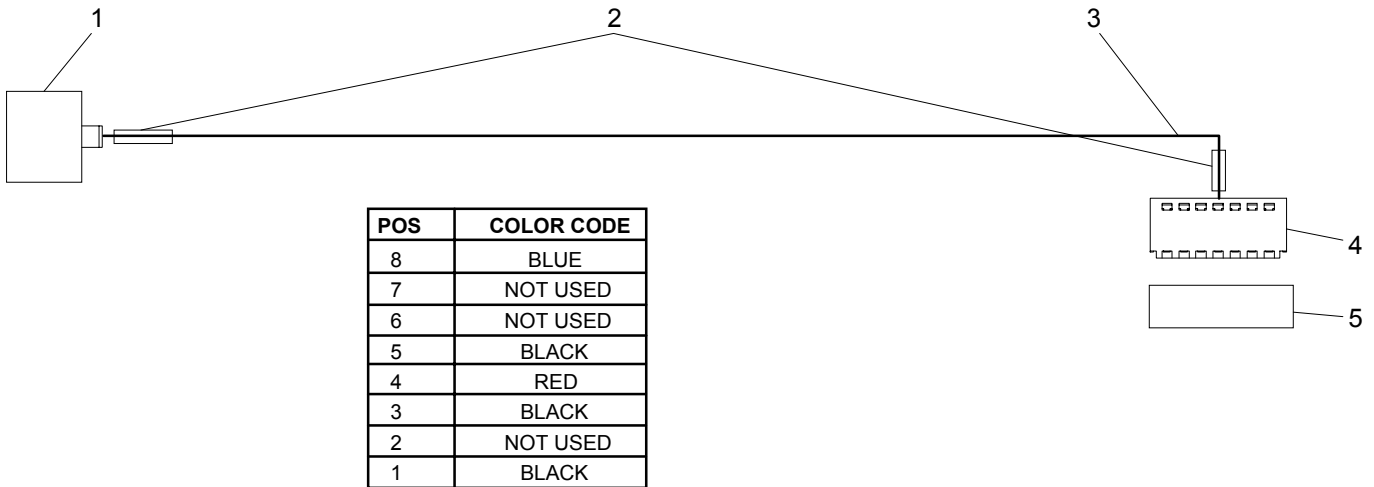
1.1.12 Data In Stanchion Cable Assembly, 7091B7003

NO.	PART NO.	QTY	DESCRIPTION
1	J6510	4 EA	COVER, STRAIN RELIEF, 4 POS, MTA
2	J6500	4 EA	RECEPT, MTA100, W/TAB, RED, 4 POS
3	J6570	16 EA	CONTACT SCKT, GLD 22AWG, TYPE 3+
4	J772	1 EA	PLUG, CPC 17-16, STD SEX
5	J775	1 EA	FLANGE, CPC 17, PANEL MOUNT
6	W6130	4 IN	HEAT SHRINK, 3/8" BLACK
7	W6135	21 IN	CABLE, 22AWG, 300V, 16 CONDUCTOR



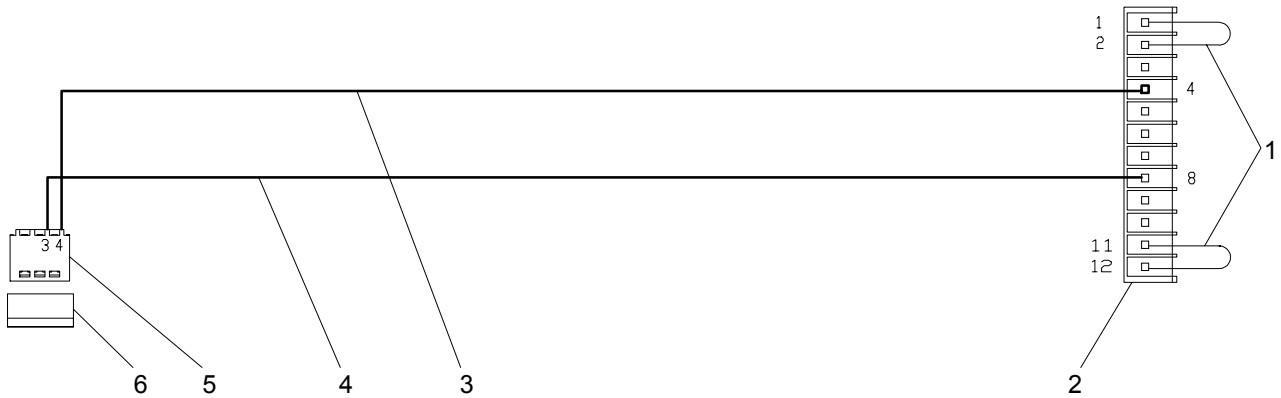
**1.1.13 Address Switch Cable Assembly
7090B7003**

NO.	PART NO.	QTY	DESCRIPTION
1	J6584	1 EA	CONNECTOR, RJ-45
2	W6130	4 IN	HEAT SHRINK, BLACK 3/8"
3	73-7091-0001	21 IN	CABLE, RJ-45
4	J6501	1 EA	RECEPT, MTA100, W/TAB, NATURAL, 8 POS
5	J6511	1 EA	COVER, STRAIN RELIEF, 8 POS, MTA



**1.1.14 PCB Power Cable Assembly
25-8003-0001**

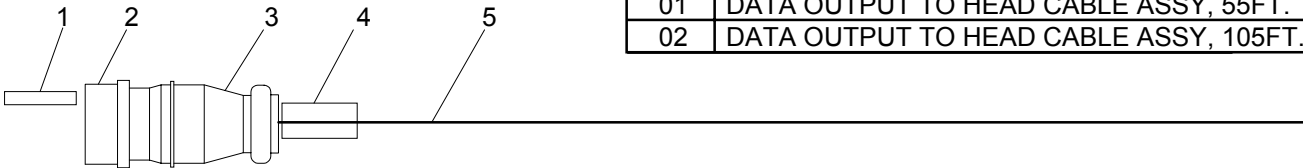
NO.	PART NO.	QTY	DESCRIPTION
1	73-7031-0001	6 IN	WIRE, 22AWG, STRANDED, BLACK
2	J6480	1 EA	RECEPT, MTA156, W/TAB, RED, 12 POS, 22AWG
3	73-7046-0001	15 IN	WIRE, 22AWG, STRANDED, GREEN
4	73-7018-0001	15 IN	WIRE, 22AWG, STRANDED, RED
5	J6500	1 EA	RECEPT, MTA100, W/TAB RED, 4 POS
6	J6510	1 EA	COVER, STRAIN RELIEF



**1.1.15 Data Output to Head Cable Assembly
7090B7004-1 and 7090B7004-2**

NO.	PART NO.	QTY	DESCRIPTION
1	J6576	16 EA	CONTACT PIN, 22AWG GLD TYPE 3+
2	J774	1 EA	RECEPT, CPC 17-16, FREE HANG
3	J773	1 EA	CLAMP, CABLE, SHELL SIZE 17
4	W6130	2.5 IN	HEAT SHRINK, 3/8" BLACK
*5	W6135	55 FT	CABLE, 22AWG, 300V, 16 COND
*5	W6135	105 FT	CABLE, 22AWG, 300V, 16 COND

*VERSION TABLE	
VER.	DESCRIPTION
01	DATA OUTPUT TO HEAD CABLE ASSY, 55FT.
02	DATA OUTPUT TO HEAD CABLE ASSY, 105FT.

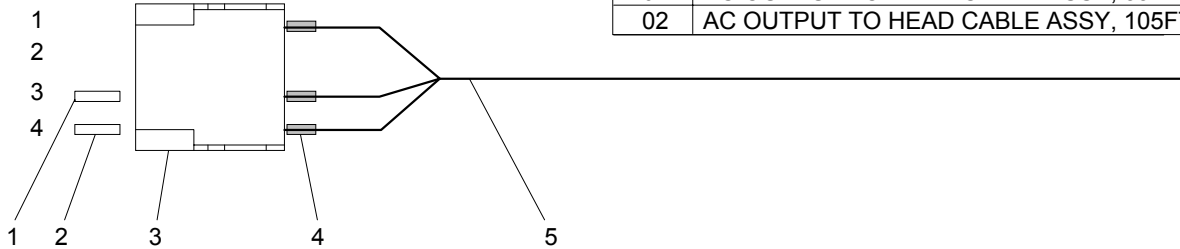


POS	COLOR CODE
1	BLACK
2	WHITE
3	RED
4	GREEN
5	ORANGE
6	BLUE
7	WHITE/BLACK STRIPE
8	RED/BLACK STRIPE
9	GREEN/BLACK STRIPE
10	ORANGE/BLACK STRIPE
11	BLUE/BLACK STRIPE
12	BLACK/WHITE STRIPE
13	RED/WHITE STRIPE
14	GREEN/WHITE STRIPE
15	BLUE/WHITE STRIPE
16	BLACK/RED STRIPE

* - Version is determined by cable length.

**1.1.16 AC Output Cable Assembly
7090B7001-1 and 7090B7001-2**

NO.	VER	PART NO.	QTY	DESCRIPTION
1	01,02	J6572	2 EA	CONTACT PIN, 2-14AWG MNLOK (POS #1,4)
2	01,02	J6577	1 EA	CONTACT, GROUND PIN, 20-14AWG MNLOK (POS #3)
3	01,02	J6494	1 EA	CAP HOUSING, MNLOK 4 POS
4	01,02	J4206	1.5 IN	HEAT SHRINK, 3/16" BLACK
*5	01	73-7126-0002	55 FT	CABLE, 14AWG, 3 COND, SJOW-A
*5	02	73-7126-0002	105 FT	CABLE, 14AWG, 3 COND, SJOW-A



*VERSION TABLE	
VER.	DESCRIPTION
01	AC OUTPUT TO HEAD CABLE ASSY, 55FT.
02	AC OUTPUT TO HEAD CABLE ASSY, 105FT.

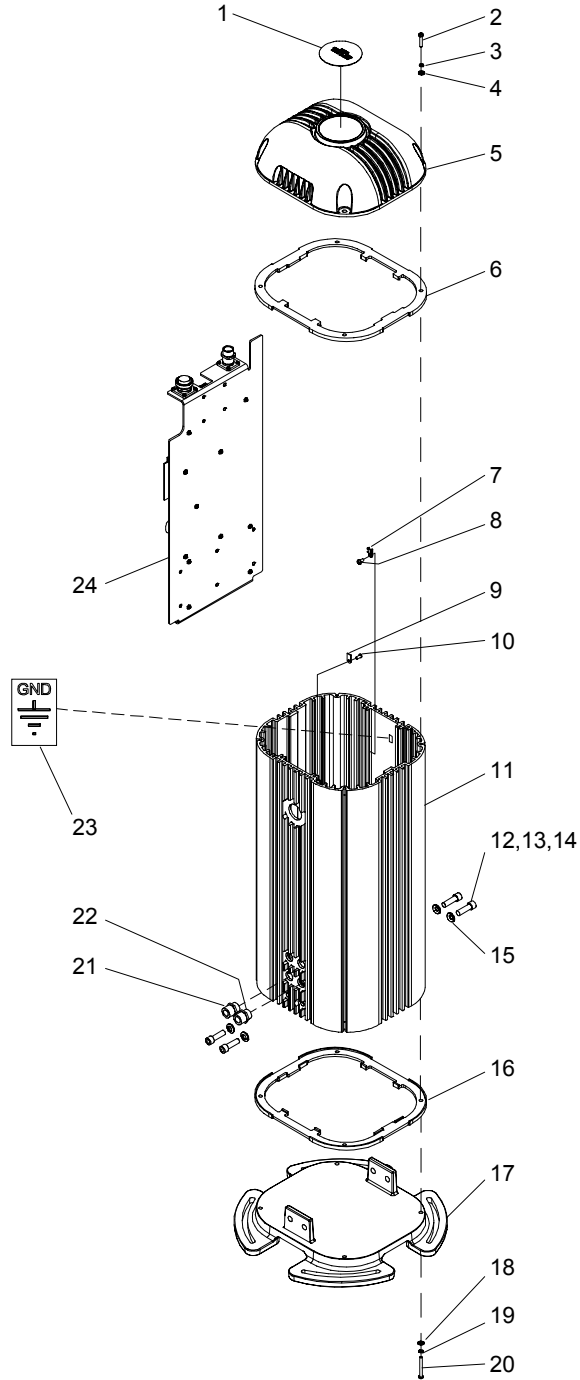
POSITION	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	BLACK	LINE	3	1
2	NONE	UNUSED	3	N/A
3	GREEN	GROUND	3	2
4	WHITE	NEUTRAL	3	1

* - Version is determined by cable length.

**1.1.17 Stanchion Pre-Assembly, Composer Controller
7091A2020**

NO.	PART NO.	QTY	DESCRIPTION
1	7091A4006	1 EA	LABEL, AR500 SERVICING, GRAY
2	HW4126	4 EA	SCREW, #10-32 X 1"PPSS
3	HW4137	4 EA	WASHER, SPLIT LOCKWASHER, #10SS
4	HW4141	4 EA	WASHER, FLAT, #10SS
5	7091A3001	1 EA	STANCHION CAP CASTING, AR500
6	7091A4089	1 EA	STANCHION MOLDED GASKET, AR500
7	HW7105	3 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
8	HW4130	3 EA	SCREW, 10-32X3/8"PPSS SEF-TAP, TYPE F
9	HW7105	1 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
10	HW4130	1 EA	SCREW, 10-32X3/8"PPSS SEF-TAP, TYPE F
11	7091A2046	1 EA	STANCHION SIDES, UNIVERSAL, AR500
12	HW5244	4 EA	SCREW, 3/8-16X1-1/4"SCSS, 316
13	HW5239	4 EA	WASHER, FLAT, 3/8SS AN960-C616
14	HW5237	4 EA	NUT, 3/8-16, LOCK, SS
15	HW5253	4 EA	WASHER, 3/8" SEALING BONDED NEOPRENE SS
16	7091A4089	1 EA	STANCHION MOLDED GASKET, AR500
17	7091A3031	1 EA	STANCHION BASE CASTING, AR500
18	HW4141	4 EA	WASHER, FLAT, #10SS
19	HW4137	4 EA	WASHER, SPLIT LOCKWASHER, #10SS
20	HW4125	4 EA	SCREW, #10-32X1-3/4"PPSS
21	J296	1 EA	CONNECTOR, CORD, HUBBELL #1016
22	J297	1 EA	CONNECTOR, CORD, HUBBELL #1017
23	7090A4017	1 EA	MARKER, WIRE GND SYMBL, VYNL
24	7091A2019	1 EA	ELECTRONICS ASSEMBLY, STANCHION, COMPOSER

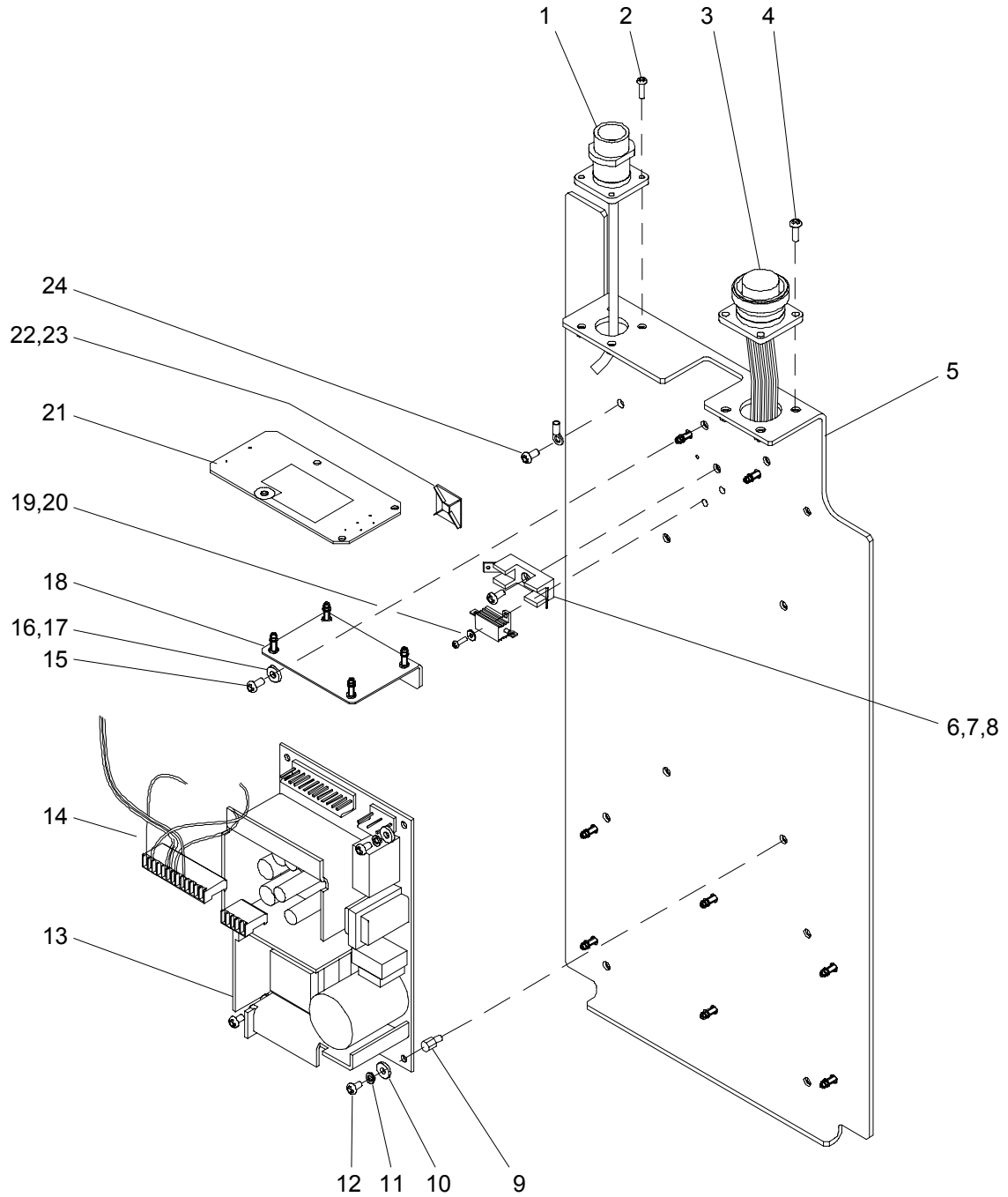
**1.1.17 Stanchion Pre-Assembly, Composer (Cont'd)
7091A2020**



**1.1.18 Electronics Assembly, Stanchion, Composer Controller
7091A2019**

NO.	PART NO.	QTY	DESCRIPTION
1	7091B7012	1 EA	CABLE ASSY, ELECTRONICS AC/DMX INPUT
2	HW1147	4 EA	SCREW, 4-40 X 7/16" PPSS
3	7091B7013	1 EA	CABLE ASSY, DATA OUT FROM CARD TO CPC CONN
4	HW2187	4 EA	SCREW, 6-32 X 7/16" PPSS
5	7091A3071	1 EA	PLATE, MOUNTING, ELECTRONICS
6	F179	1 EA	FUSEBLOCK, QUICK CONN. 1/4", 40 DEG, 1 POLE
7	F168	1 EA	FUSE, 5A
8	HW2185	1 EA	SCREW, 6-32 X 5/16" PPSS
9	HW9211	4 EA	STANDOFF, 1/4"HEX 6-32 X 1/4" SSMF
10	HW2214	4 EA	WASHER, FLAT, #6, SS
11	HW2218	4 EA	WASHER, SPLITLOCK, #6, SS
12	HW2116	4 EA	SCREW, 6-32 X 1/4" PPSS
13	PS144	1 EA	POWER SUPPLY, 80W,+5+24+15-15VDC, QUAD
14	7091B7011	1 EA	CABLE ASSY, DC FROM POWER SUPPLY TO CARD
15	HW2185	2 EA	SCREW, 6-32 X 5/16" PPSS
16	HW214	2 EA	WASHER, FLAT, #6, SS
17	709AB7011	1 EA	AR5 CONTROL CARD BRACKET FOR AR500
18	HW0021	2 EA	SCREW, 2-56 X 5/16" PPSS
19	HW0022	2 EA	WASHER, FLAT, #2, SS
20	7091B5004	1 EA	ASSY, AR5 CONTROLLER PCB, AR500 VERSION
21	HW7109	3 EA	SADDLE, CABLE, ADHESIVE BACKED
22	HW7102	4 EA	CABLE TIE, SMALL .10X4"
23	HW2185	1 EA	SCREW, 6-32 X 5/16" PPSS

1.1.18 Electronics Assembly, Stanchion, *Composer Controller* 7091A2019

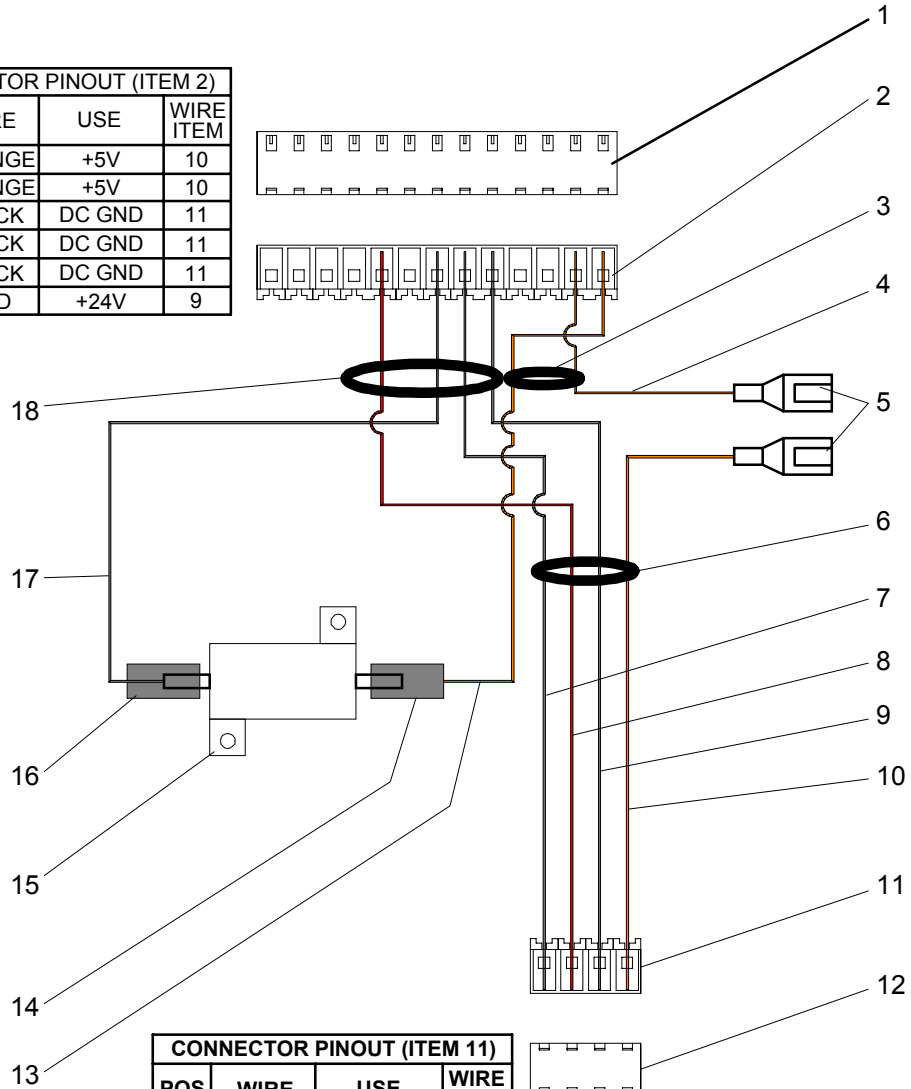


**1.1.19 Cable Assembly, DC Power Supply to Control PCB
7091B7011**

NO.	PART NO.	QTY	DESCRIPTION
1	J6522	1 EA	COVER, STRAIN RELIEF, 13POS, MTA156
2	J6517	1 EA	RECEPT, MTA-156, 13POS, RED
3	HW7102	1 EA	CABLE TIE, SMALL 0.10X4"
4	W265	5.5 IN	WIRE, 22AWG, 300V 80C PVC ORANGE UL1007
5	J4229	2 EA	RECP, FASTON ¼" 22-18AWG INS. (LOOSE)
6	HW7102	1 EA	CABLE TIE, SMALL 0.10X4"
7	W269	7.5 IN	WIRE, 22AWG, 300V 80C PVC BLACK UL1007
8	W264	7.5 IN	WIRE, 22AWG, 300V 80C PVC RED UL1007
9	W269	7.5 IN	WIRE, 22AWG, 300V 80C PVC BLACK UL1007
10	W265	6 IN	WIRE, 22AWG, 300V 80C PVC ORANGE UL1007
11	J6500	1 EA	RECEPT, MTA100 W/TAB RED, 4 POSITION
12	J6510	1 EA	COVER, STRAIN RELIEF, 4POS MTA
13	W265	5 IN	WIRE, 22AWG, 300V 80C PVC ORANGE UL1007
14	W6132	.75 IN	HEAT SHRINK, 1/8" BLK
15	R474	1 EA	RES, 10W 1% 10 OHM, WW
16	W6132	.75 IN	HEAT SHRINK, 1/8" BLK
17	W269	6 IN	WIRE, 22AWG, 300V 80C PVC BLACK UL1007
18	HW7102	1 EA	CABLE TIE, SMALL 0.10X4"

**1.1.18 Cable Assembly, DC Power Supply to Control PCB
(Cont'd.) 7091B7001**

CONNECTOR PINOUT (ITEM 2)			
POS	WIRE	USE	WIRE ITEM
1	ORANGE	+5V	10
2	ORANGE	+5V	10
5	BLACK	DC GND	11
6	BLACK	DC GND	11
7	BLACK	DC GND	11
9	RED	+24V	9

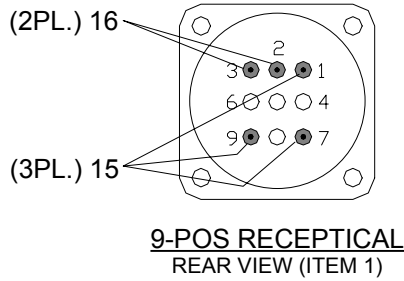


CONNECTOR PINOUT (ITEM 11)			
POS	WIRE	USE	WIRE ITEM
1	BLACK	DC GND	11
2	RED	+24V	9
3	BLACK	DC GND	11
4	ORANGE	+5V	10

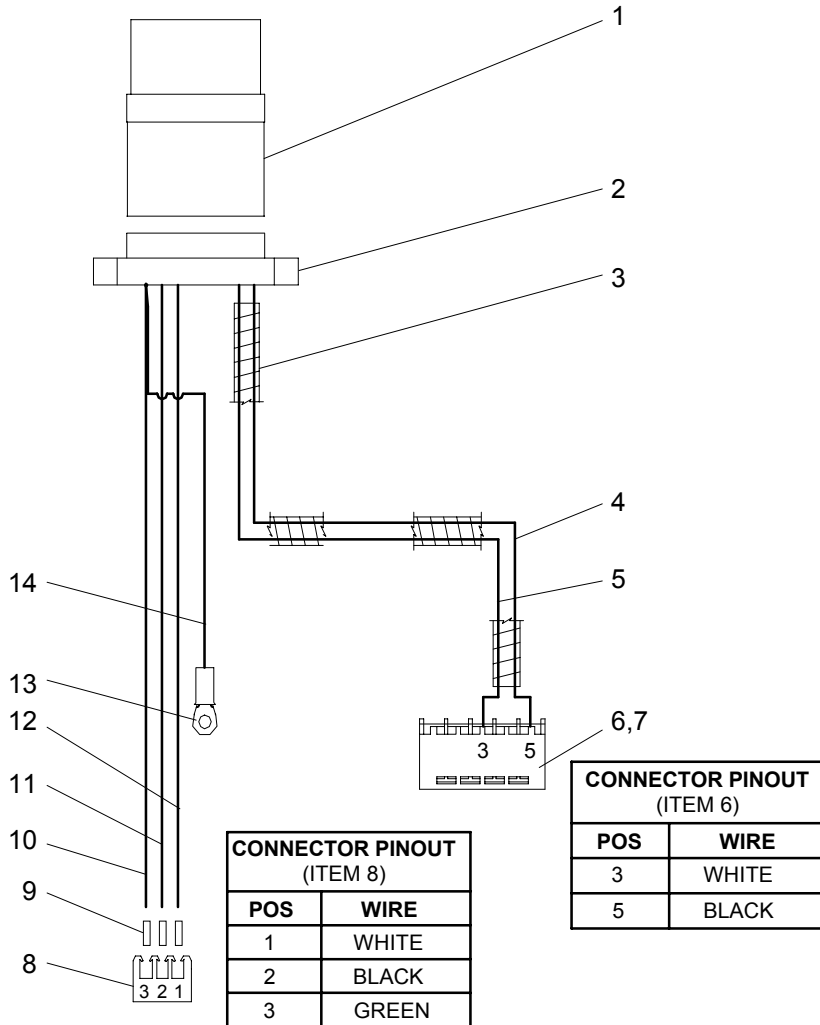
**1.1.20 Cable Assembly, AC/DMX Input, Composer
7091A7012**

NO.	PART NO.	QTY	DESCRIPTION
1	J6482	1 EA	RECEPT, 9 POSITION MALE
2	J769	1 EA	FLANGE, 9 POSITION CONNECTOR MNT
3	HW6165	11 IN	SPIRAL WRAP, 3/8"
4	W348	12 IN	WIRE, 18AWG, 300V 105C PVC BLK UL1596
5	W347	12 IN	WIRE, 18AWG, 300V 105C PVC WHT UL1596
6	J6514	1 EA	CONN, IDC, MTA156, 5POS, 18AWG
7	J6519	1 EA	COVER, STRAIN RELIEF, 5POS, MTA156
8	J6554	1 EA	CONN, FEM PLUG, 3POS, 30-24AWG, JST
9	J6557	3 EA	CONTACT, SOCKET, 30-24AWG, CRIMP (REEL) PH(JST)
10	W349	3.5 IN	WIRE, 18AWG, 300V 105C PVC GRN/YEL UL1596
11	W363	6 IN	WIRE, 24AWG, 300V 105C PVC BLK UL1007
12	W362	6 IN	WIRE, 24AWG, 300V 105C PVC WHT UL1007
13	52-8250-0007	1 EA	TERM, RING #10 18-22AWG
14	W359	6 IN	WIRE, 24AWG, 300V 105C PVC GRN UL1007
15	J6575	3 EA	PIN, TIN 18-16AWG CRIMP (LOOSE) TYPE 3+
16	J6576	2 EA	PIN, GOLD 24-20AWG (LOOSE) TYPE 3+

**1.1.19 Cable Assembly, AC/DMX Input, Composer (Cont'd.)
7091B7012**



CONNECTOR PINOUT (ITEM 1)				
POS	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	GREEN	GROUND	14	15
1	GREEN	DRAIN	10	
2	BLACK	DATA	11	16
3	WHITE	DATA	12	16
7	WHITE	AC/PWR	5	15
9	BLACK	AC/PWR	4	15



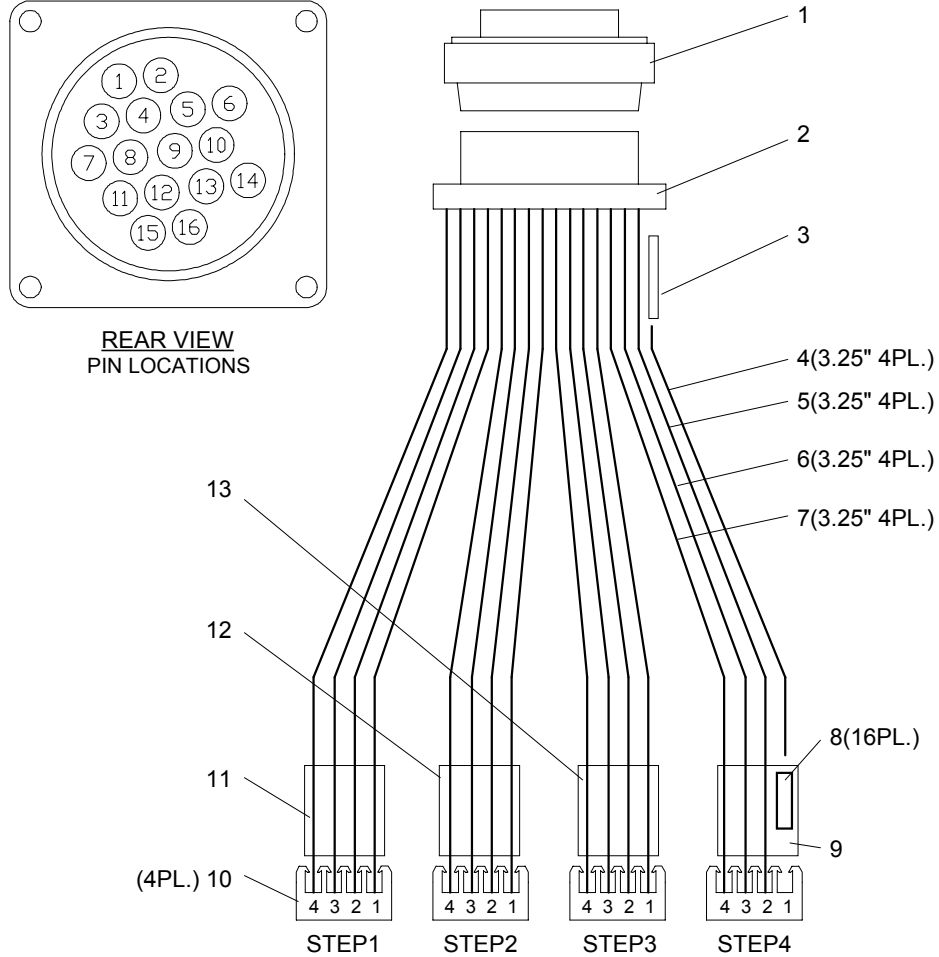
**1.1.21 Cable Assembly, Data Output, AR5 Type Control PCB
7091B7013**

NO.	PART NO.	QTY	DESCRIPTION
1	J772	1 EA.	PLUG, CPC 17-16, STD SEX
2	J775	1 EA.	FLANGE, CPC 17, PANEL MOUNT
3	J6570	16 EA.	CONTACT,SCKT,GLD 22AWG,TYPE 3+
4	W358	13 IN.*	WIRE,24AWG,300V,105C,PVC,RED,UL1007
5	W363	13 IN.*	WIRE,24AWG,300V,105C,PVC,BLACK,UL1007
6	W360	13 IN.*	WIRE,24AWG,300V,105C,PVC,BLUE
7	W359	13 IN.*	WIRE,24AWG,300V,105C,PVC,GREEN,UL1007
8	J6557	16 EA.	CONTACT,SCKT,30-24AWG,CRIMP(REEL),PH(JST)
9	W6134	0.5 IN.	HEAT SHRINK, HCG 1/8" BLACK
10	J6555	4 EA.	CONN,FEM PLUG,4POS,30-24AWG,CRIMP,PH(JST)
11	W6140	0.5 IN.	HEAT SHRINK, HCG 1/8" BLUE
12	W6138	0.5 IN.	HEAT SHRINK, HCG 1/8" YELLOW
13	W6136	0.5 IN.	HEAT SHRINK, HCG 1/8" RED

Note: This cable assembly must be assembled at Irideon, Inc. The JST contact socket (Item 8) requires a special tool for installation.

* - Wire is cut into four pieces 3.25 inches long.

1.1.20 Cable Assembly, Data Output, AR5 Type Control PCB 7091B7013 (Continued)



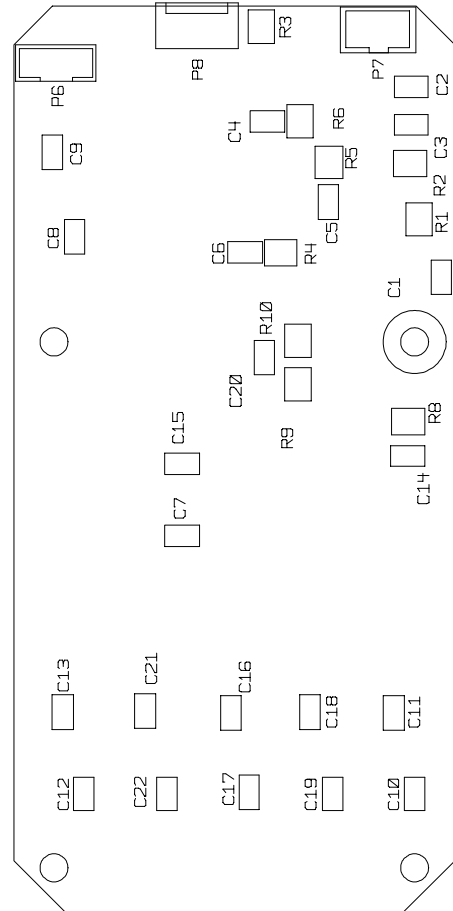
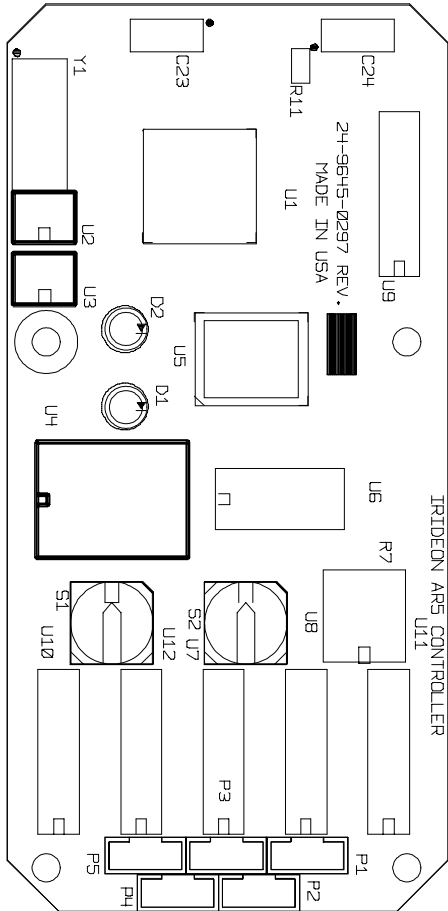
WIRE LAYOUT AND POSITION ASSIGNMENT TABLE				
ITEM 10 ASSIGNMENTS		COLOR CODE	ITEM 1 ASSIGNMENTS	
WIRE BUNDLES	POS		POS	HEAD FUNCTION
STEP 1	1	RED	4	BLUE
	2	BLACK	3	
	3	BLUE	2	
	4	GREEN	1	
STEP 2	1	RED	8	AMBER
	2	BLACK	7	
	3	BLUE	6	
	4	GREEN	5	
STEP 3	1	RED	12	MAGENTA
	2	BLACK	11	
	3	BLUE	10	
	4	GREEN	9	
STEP 4	1	RED	16	DIFF/DIOUS
	2	BLACK	15	
	3	BLUE	14	
	4	GREEN	13	

PL.=PLACES

**1.1.22 AR5 Controller PCB, AR500 Version (Composer Controller)
7091B5004**

NO.	PART NO.	QTY	REF. DESG.	DESCRIPTION
1	7092B4001	1 EA.		PCB, CONTROLLERAR5
2	J9022	1 EA.	U5	SOCKET, 32 PIN LOW PROFILE PLCC SRF MNT
3	J6488	1 EA.	P8	HEADER, MTA FRCT LOK STRT POST 4PIN
4	J6526	1 EA.	P7	HEADER, SHROUDED 3 POSITION
5	J6527	6 EA.	P1-P6	HEADER, SHROUDED 4 POSITION
6	R9138	6 EA.	R1,R3-R6,R8	RES, .1W 5% 10K 100V CHIP THICK FILM
7	R9139	1 EA.	R2	RES, .1W 5% 10 MEG 100V CHIP THICK FILM
8	R9145	2 EA.	R9,R10	RES, .1W 5% 510 OHM 100V CHIP THICK FILM
9	R9154	1 EA.	R7	RES NET, 10K .08W 50V 2% SRF MNT
10	C9046	20 EA.	C1,C4-C22	CAP, 1uF 50V 20% CER CHIP SRF MNT EIA0805
11	C9047	2 EA.	C2,C3	CAP, 20pF 50V 5% CER CHIP SRF MNT EIA0805
12	C9052	2 EA.	C23,C24	CAP, 10uF 35V 10% TANT SRF MNT EIA-D
13	Y9019	1 EA.	Y1	CRYSTAL, 16MHZ SURF MNT
14	S312	2 EA.	S1,S2	SWITCH, ROTARY BINARY CODED
15	S313	2 EA.	S1,S2	KNOB, SNAP-IN FOR 74.1042.0001
16	Z9153	1 EA.	U2	IC, MC34164D-5 SENSING CIRCUIT UNDERVOLTAGE SURF MNT
17	Z9154	1 EA.	U1	IC, MC68HC11 SURF MNT 8 BIT MICROPROCESSOR
18	Z9155	1 EA.	U3	IC, RS485 TRANSCEIVER SUR MNT SOIC PKG
19	Z659	1 EA.	U6	IC, 74FCT162374 16 BIT REGISTER
20	Z660	1 EA.	U4	IC, MS6264L 8K x 8 SRAM SMALL OUTLINE
21	Z678	6 EA.	U7-U12	IC, L293D DRIVER 4 CHANNEL W/DIODES
22	CR280	1 EA.	D1	LED, GREEN
23	CR281	1 EA.	D2	LED, YELLOW
24	Z693	1 EA.	U5	PROM, 27C256B-90C1 PGMD: AR500COMPOSER, VER 1-29-97
25	R9144	1 EA.	R11	RES, .1W, 5%, 3.3K, 100V CHIP THICK FILM

**1.1.22 AR5 Controller PCB, AR500 Version (Composer Controller)
7091B5004 (Cont'd.)**



**1.1.23 Ballast Assembly, Standard Version
23-9642-3041 thru -3048**

NO.	VER	PART NO.	QTY	DESCRIPTION
1	**A-H	J768	1 EA	CONN HOUSING, SERIES 30, W/O FLGNS, 3 POS
2	**A-H	J4217	2 EA	CRIMP CONTACT, S30 TIN
3	**A-H	W444	50 IN	WIRE, 16AWG, 30KV, CHAMPLAIN ONLY 3239B
4	A-H	HW6164	24 IN	SPIRAL WRAP, 1/2"
5	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
6	A-H	HW2187	1 EA	SCREW, 6-32X7/16"PPSS
7	*A	CB237	1 EA	C-BREAKER, 14AMP, SELF RESETTING, AR500
7	*B	CB235	1 EA	C-BREAKER, 10AMP, SELF RESETTING, AR500
7	*C,D,E, F,H	CB234	1 EA	C-BREAKER, 5.5AMP, SELF RESETTING, AR500
7	*G	CB234	1 EA	C-BREAKER, 7AMP, SELF RESETTING, AR500
8	***A-H	J4231	2 EA	RCPT, FASTON 1/4" 18-14AWG FLAG DBL CRP
9	A-H	HW2187	1 EA	SCREW, 6-32X7/16"PPSS
10	***A-H	J6497	1 EA	CAP HOUSING, MNLOK, 3 POS
11	***A-H	J6572	1 EA	CONTACT PIN, 20-14AWG, MNLOK
12	***A-H	J6577	1 EA	CONTACT PIN, GROUND, 20-14AWG, MNLOK
13	***A-H	J6572	1 EA	CONTACT PIN, 20-14AWG, MNLOK
14	A-H	HW6165	12 IN	SPIRAL WRAP, 3/8"
15	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
16	A-H	7091A2012	1 EA	AR500 INITIAL BALLAST ASSY
17	A-H	HW4121	2 EA	SCREW, 10-32X1/2"PPSS
18	A-H	HW4142	2 EA	WASHER, #10 FLAT
19	*A	L192	1 EA	XFMR, AUTO, 1KVA, 95/100V@50HZ TO 230V
19	*B	L189	1 EA	XFMR, AUTO, 1KVA, 110/120V@60HZ TO 230V
19	*C,E,G	L193	1 EA	XFMR, AUTO, 1KVA, 191/277V@50/60HZ TO 230V
19	D,F,H	N/A	0 EA	NO TRANSFORMER REQUIRED
20	A-H	HW7103	1 EA	CABLE TIE, BLACK, 0.18x12"

* - Version is dependent on incoming voltage.

** - Items supplied in cable assembly 7091B7009.

*** - Items supplied in cable assembly 7091B7007.

1.1.23 Ballast Assembly, Standard Version (Continued) 7091B2001 thru 7091B2008

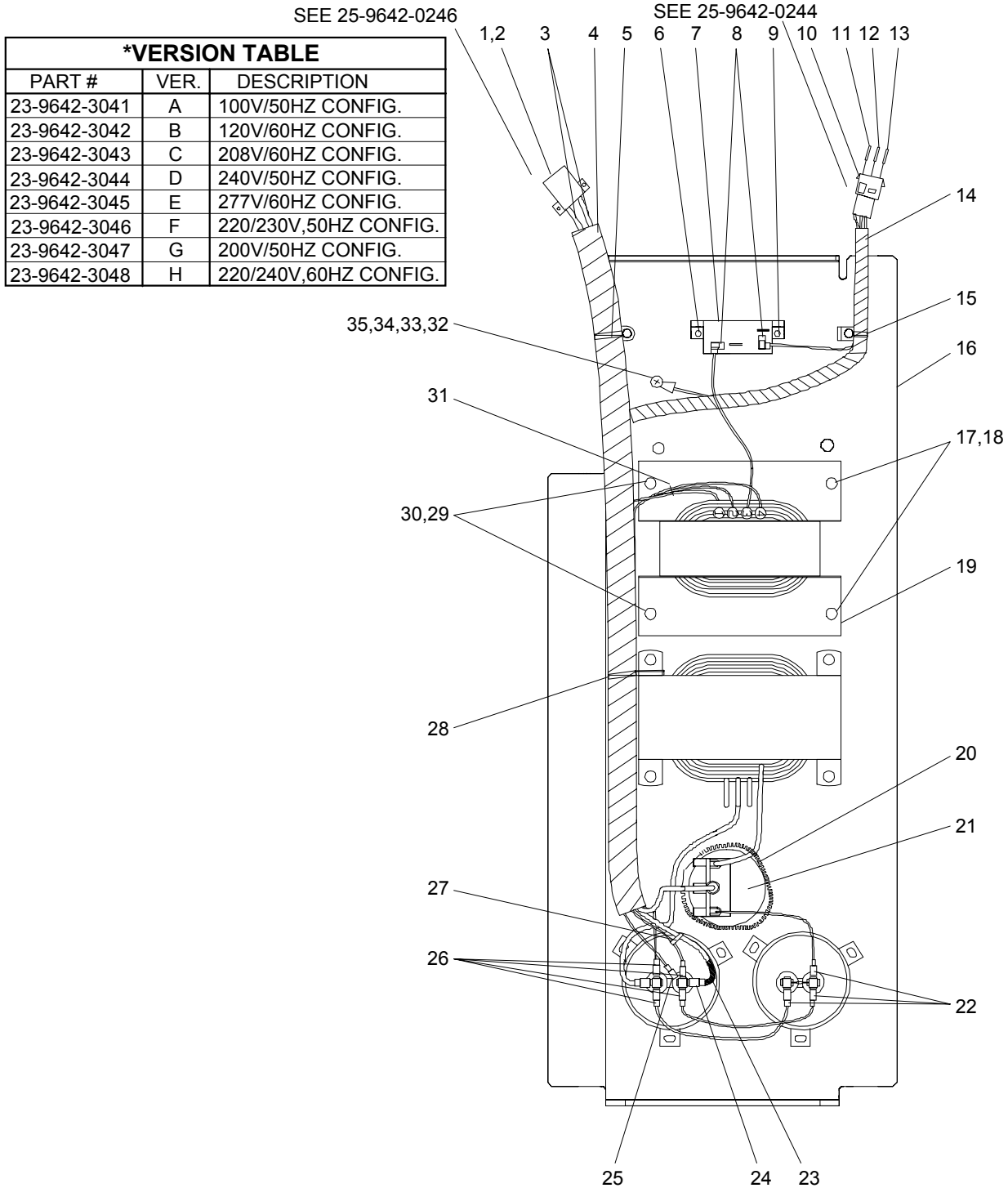
NO.	VER	PART NO.	QTY	DESCRIPTION
21	A-H	L191	1 EA	IGNITOR, 230V, 50/60HZ
22	A-H	J4222	3 EA	FASTON RECEPT, 16-14AWG (LOOSE)
23	**A-H	W6128	.084 FT	HEAT SHRINK, 1/4" BLACK
24	**A-H	J4222	1 EA	FASTON RECEPT, 16-14AWG (LOOSE)
25	A-C,E,G	J4222	1 EA	FASTON RECEPT, 16-14AWG (LOOSE)
26	A-H	J4222	4 EA	FASTON RECEPT, 16-14AWG (LOOSE)
27	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
28	A-H	HW7104	1 EA	CABLE TIE, MED
29	A-H	HW4142	2 EA	WASHER, #10 FLAT
30	A-H	HW4121	2 EA	SCREW, 10-32X1/2"PPSS
31	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
32	A-H	J4219	1 EA	TERM, RING #10 22-16AWG (TAPE, RED)
33	A-H	HW417	1 EA	SCREW, 10-32X3/8"PPSS
34	A-H	HW4142	1 EA	WASHER, #10 FLAT
35	A-H	HW4137	1 EA	WASHER, SPLITLOCK, #10SS 7/16"OD 0.04 THK
NS	A-H	W343	9 IN	WIRE, 18AWG, 300V, 80°C, PVC GRN UL1007
NS	A-H	W368	50 IN	WIRE, 16AWG, 600V, 105°C, PVC WHT UL1015
NS	A-H	W440	6 IN	WIRE, 16AWG, 600V, 105°C, PVC BLK UL1015
NS	D,F,H	W440	24 IN	WIRE, 16AWG, 600V, 105°C, PVC BLK UL1015
NS	A-H	W6132	.334 FT	HEAT SHRINK, 1/8" BLACK

* - Version is dependent on incoming voltage.

** - Items supplied in cable assembly 7091B7009.

*** - Items supplied in cable assembly 7091B7007.

**1.1.23 Ballast Assembly, Standard Version (Continued)
7091B2001 thru 7091B2008**



* - Version is dependent on incoming voltage.

1.1.24 Ballast Assembly, Remote Version 7091B2009 thru 7091B2016

NO.	VER	PART NO.	QTY	DESCRIPTION
1	**A-H	J6493	1 EA	PLUG HOUSING, MNLOK 4 POS
2	**A-H	J6571	3 EA	CONTACT SOCKET, 20AWG, TIN MNLOK REEL
3	A-H	HW6164	24 IN	SPIRAL WRAP, 1/2"
4	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
5	A-H	HW2187	1 EA	SCREW, 6-32X7/16"PPSS
6	*A	CB237	1 EA	C-BREAKER, 14AMP, SELF RESETTING, AR500
6	*B	CB235	1 EA	C-BREAKER, 10AMP, SELF RESETTING, AR500
6	*C,D,E, F,H	CB234	1 EA	C-BREAKER, 5.5AMP, SELF RESETTING, AR500
6	*G	CB234	1 EA	C-BREAKER, 7AMP, SELF RESETTING, AR500
7	***A-H	J4231	2 EA	RCPT, FASTON 1/4" 18-14AWG FLAG DBL CRP
8	A-H	HW2187	1 EA	SCREW, 6-32X7/16"PPSS
9	***A-H	J6497	1 EA	CAP HOUSING, MNLOK, 3 POS
10	***A-H	J6572	1 EA	CONTACT PIN, 20-14AWG, MNLOK
11	***A-H	J6577	1 EA	CONTACT PIN, GROUND, 20-14AWG, MNLOK
12	***A-H	J6572	1 EA	CONTACT PIN, 20-14AWG, MNLOK
13	A-H	HW6165	12 IN	SPIRAL WRAP, 3/8"
14	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
15	A-H	7091A2012	1 EA	AR500 INITIAL BALLAST ASSY
16	A-H	HW4121	2 EA	SCREW, 10-32X1/2"PPSS
17	A-H	HW4142	2 EA	WASHER, #10 FLAT
18	*A	L192	1 EA	XFMR, AUTO, 1KVA, 95/100V@50HZ TO 230V
18	*B	L189	1 EA	XFMR, AUTO, 1KVA, 110/120V@60HZ TO 230V
18	*C,E,G	L193	1 EA	XFMR, AUTO, 1KVA, 191/277V@50/60HZ TO 230V
18	D,F,H	N/A	0 EA	NO TRANSFORMER REQUIRED

* - Version is dependent on incoming voltage.

** - Items supplied in cable assembly **25-9642-0247**.

*** - Items supplied in cable assembly **25-9642-0245**.

**1.1.24 Ballast Assembly, Remote Version (Continued)
7091B2009 thru 7091B2016**

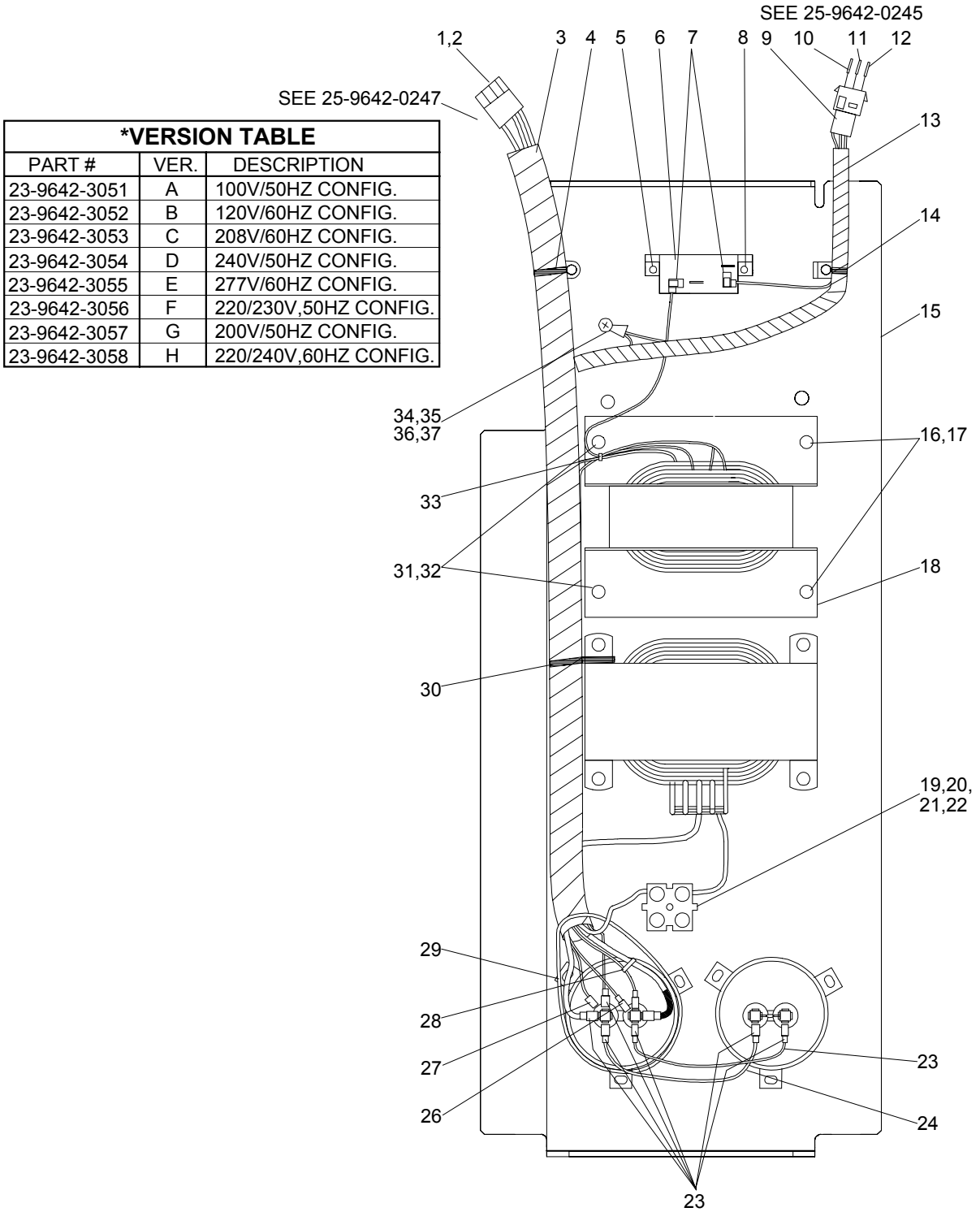
NO.	VER	PART NO.	QTY	DESCRIPTION
19	A-H	J3321	1 EA	TERMINAL STRIP, 300V, 12AWG, 20A, 2 POS
20	A-H	HW3149	1 EA	WASHER, #8SS, 3/4"OD
21	A-H	HW3146	1 EA	WASHER, SPLIT LOCK, #8
22	A-H	HW3128	1 EA	SCREW, 8-32X5/8"PPSS
23	A-H	W439	6 IN	WIRE, 16AWG, 600V, 105°C, PVC WHT UL1015
24	A-H	W440	6 IN	WIRE, 16AWG, 600V, 105°C, PVC BLK UL1015
25	A-H	J4222	6 EA	FASTON RECEPT, 16-14AWG (LOOSE)
26	A-C, E, G	J4222	1 EA	FASTON RECEPT, 16-14AWG (LOOSE)
27	A-C	J4222	1 EA	FASTON RECEPT, 16-14AWG (LOOSE)
28	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
29	A-H	HW7103	1 EA	CABLE TIE, BLACK, 0.18X12"
30	A-H	HW7104	1 EA	CABLE TIE, MED
31	A-H	HW4142	2 EA	WASHER, #10 FLAT
32	A-H	HW4121	2 EA	SCREW, 10-32X1/2"PPSS
33	A-H	HW7102	1 EA	CABLE TIE, SMALL 0.10x4"
34	***A-H	J4219	1 EA	TERM, RING #10 22-16AWG (TAPE, RED)
35	A-H	HW417	1 EA	SCREW, 10-32X3/8"PPSS
36	A-H	HW4142	1 EA	WASHER, #10 FLAT
37	A-H	HW4137	1 EA	WASHER, SPLITLOCK, #10SS 7/16"OD 0.04 THK
NS	A-H	W6132	.334 FT	HEAT SHRINK, 1/8" BLACK

* - Version is dependent on incoming voltage.

** - Items supplied in cable assembly **25-9642-0247**.

*** - Items supplied in cable assembly **25-9642-0245**.

**1.1.24 Ballast Assembly, Remote Version (Continued)
7901B2009 thru 7091B2016**



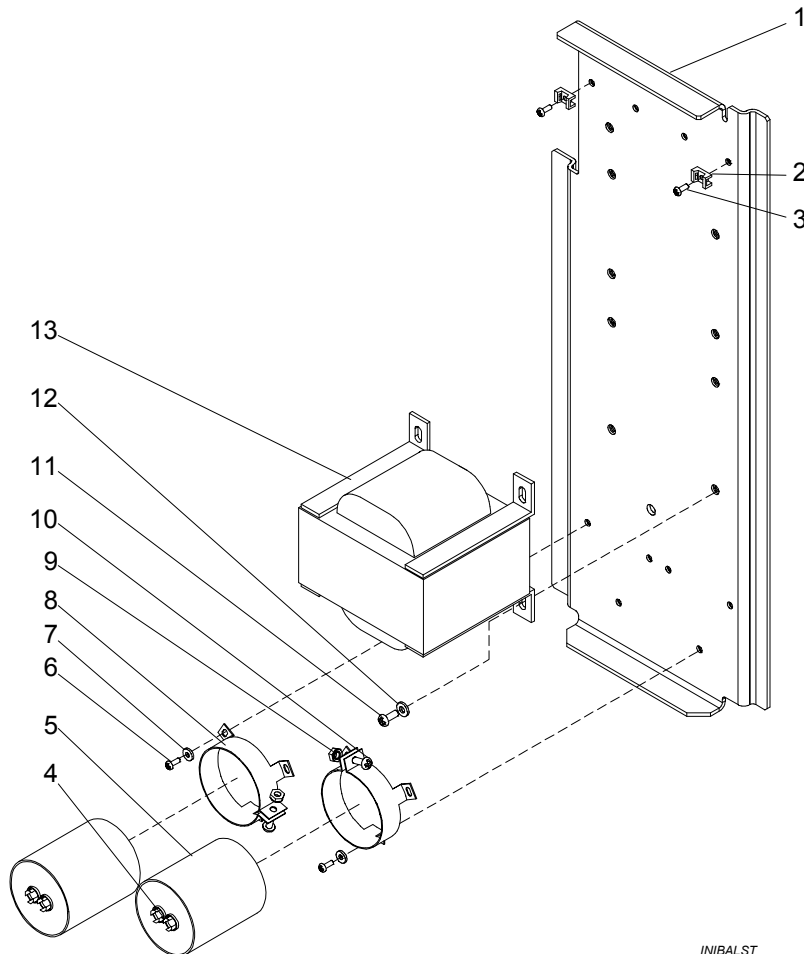
***VERSION TABLE**

PART #	VER.	DESCRIPTION
23-9642-3051	A	100V/50HZ CONFIG.
23-9642-3052	B	120V/60HZ CONFIG.
23-9642-3053	C	208V/60HZ CONFIG.
23-9642-3054	D	240V/50HZ CONFIG.
23-9642-3055	E	277V/60HZ CONFIG.
23-9642-3056	F	220/230V, 50HZ CONFIG.
23-9642-3057	G	200V/50HZ CONFIG.
23-9642-3058	H	220/240V, 60HZ CONFIG.

* - Version is dependent on incoming voltage.

1.1.25 Initial Ballast Assembly 7091A2012

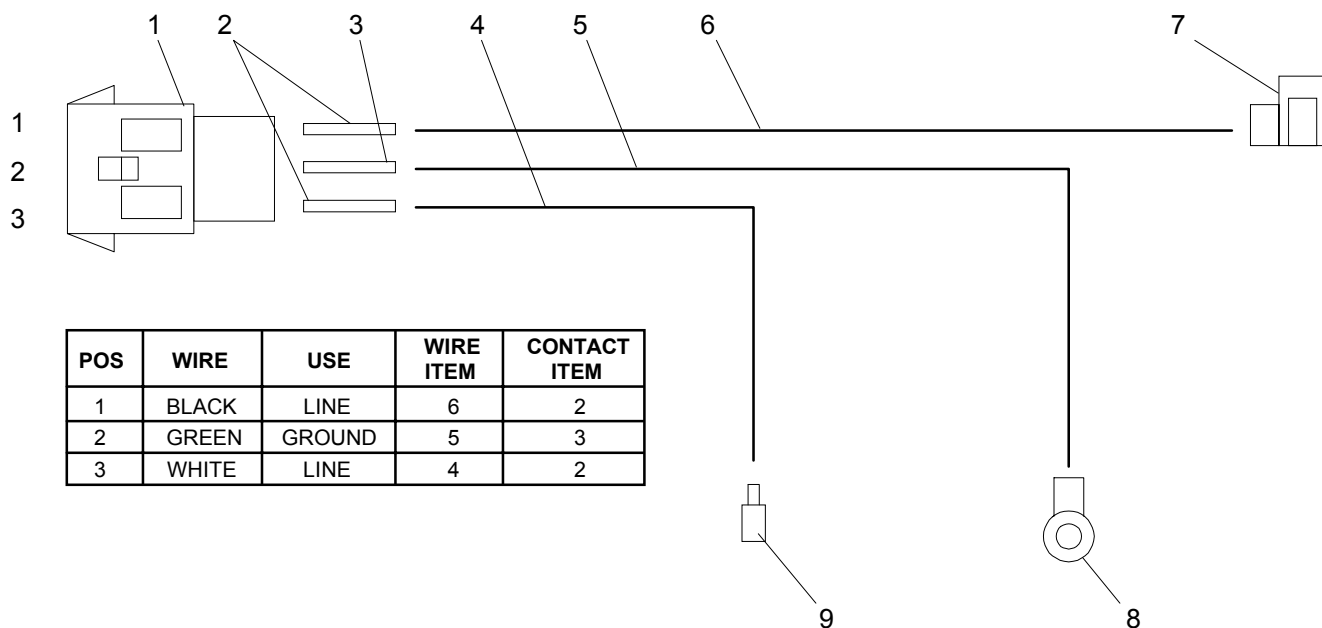
NO.	PART NO.	QTY	DESCRIPTION
1	7091A3045	1 EA	MOUNTING PLATE, BALLAST
2	HW7107	2 EA	CABLE ANCHOR MOUNT, #6 SCREW MOUNTING
3	HW2186	2 EA	SCREW, 6-32X3/8"PPSS
4	R453	1 EA	RESISTOR, 1/4W, 5%, 330K CF
5	C338	2 EA	CAP, 60uF, 370VAC, ALUMINUM, 60HZ
6	HW2186	6 EA	SCREW, 6-32X3/8"PPSS
7	HW2214	6 EA	WASHER, FLAT, #6 SS
8	HW8233	2 EA	CAPACITOR MOUNTING BRACKET
9	HW4119	2 EA	NUT, 10-32X1/2"PPSS
10	HW4121	2 EA	SCREW, 10-32X1/2"PPSS
11	HW4121	4 EA	SCREW, 10-32X1/2"PPSS
12	HW4141	4 EA	WASHER, FLAT, #10 SS
13	L190	1 EA	INDUCTOR, 700W, AR500



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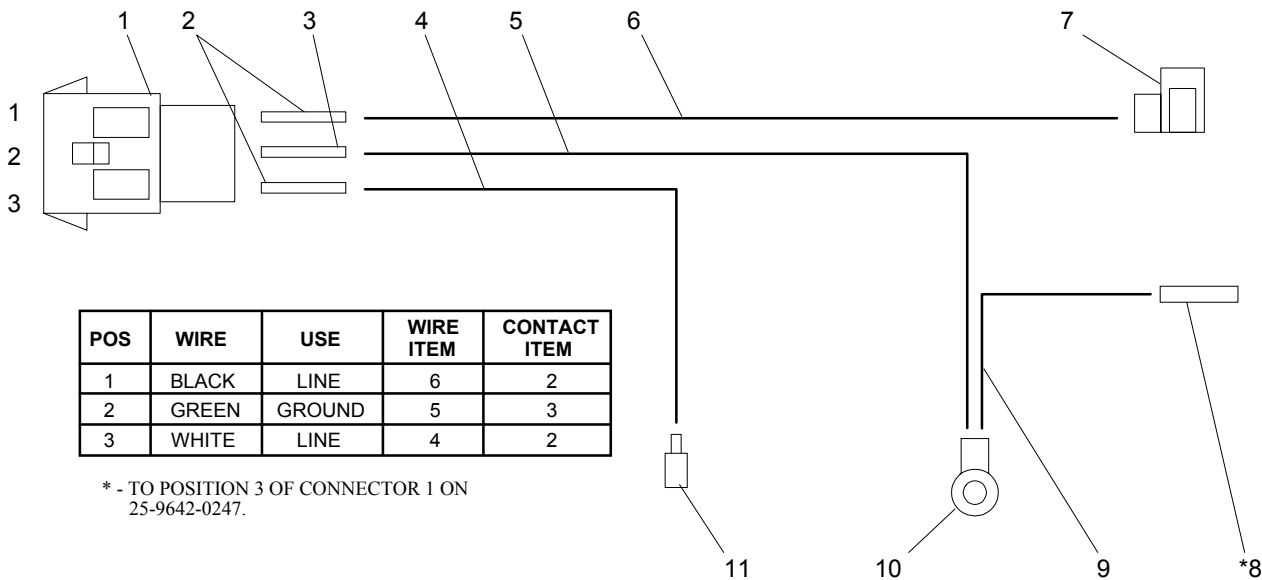
1.1.26 Ballast Power In Cable Assembly, Standard Version 7091B7007

NO.	PART NO.	QTY	DESCRIPTION
1	J6497	1 EA	CAP HOUSING, MNLOK 3 POS
2	J6572	2 EA	CONTACT PIN, 20-14AWG, MNLOK
3	J6577	1 EA	CONTACT PIN, GROUND, 20-14AWG, MNLOK
4	W439	30 IN	WIRE, 16AWG, 600V, 105°C, PVC WHT UL1015
5	73-3016-0005	10 IN	WIRE, 16AWG, 80°C, PVC GRN UL1007
6	73-3016-0010	8 IN	WIRE, 16AWG, 600V, 105°C, PVC BLK UL1015
7	J4231	1 EA	RCPT, FASTON 1/4" 18-14AWG FLAG DBL CRP
8	J4219	1 EA	TERM, RING #10 22-16AWG (TAPE MNT)
9	J4222	1 EA	RCPT, 1/4" FASTON, 16-14AWG (LOOSE)



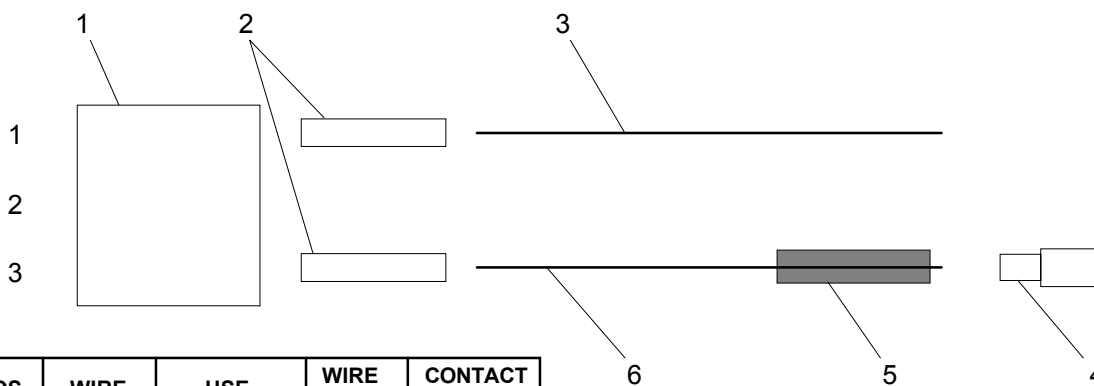
**1.1.27 Ballast Power In Cable Assembly, Remote Version
7091B7008**

NO.	PART NO.	QTY	DESCRIPTION
1	J6497	1 EA	CAP HOUSING, MNLOK 3 POS
2	J6572	2 EA	CONTACT PIN, 20-14AWG, MNLOK
3	J6577	1 EA	CONTACT PIN, GROUND, 20-14AWG, MNLOK
4	W439	30 IN	WIRE, 16AWG, 600V, 105°C, PVC WHT UL1015
5	73-3016-0005	10 IN	WIRE, 16AWG, 80°C, PVC GRN UL1007
6	73-3016-0010	8 IN	WIRE, 16AWG, 600V, 105°C, PVC BLK UL1015
7	J4231	1 EA	RCPT, FASTON 1/4" 18-14AWG FLAG DBL CRP
*8	J6571	1 EA	CONTACT SOCKET, 20AWG TIN MNLOK
9	W343	8 IN	WIRE, 18AWG, 80°C, PVC GRN UL1007
10	J4219	1 EA	TERM, RING #10 22-16AWG (TAPE MNT)
11	J4222	1 EA	RCPT, 1/4" FASTON, 16-14AWG (LOOSE)



**1.1.28 Ballast Power Out Cable Assembly, Standard Version
7091B7009**

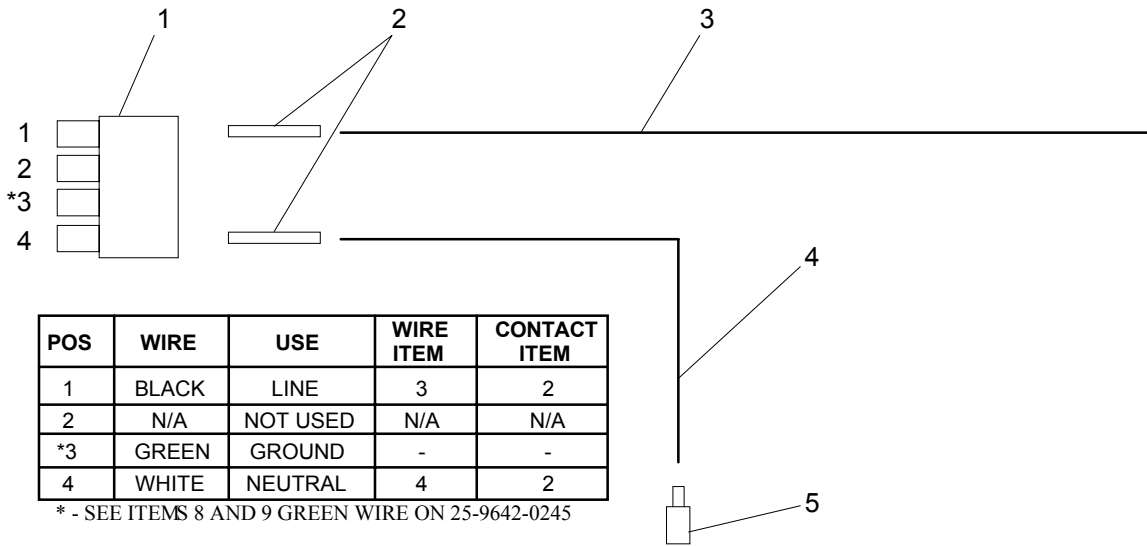
NO.	PART NO.	QTY	DESCRIPTION
1	J768	1 EA	CONN HOUSING, SERIES 30, W/O FLGNS
2	J4217	2 EA	CRIMP CONTACT, S30 TIN
3	W444	25 IN	WIRE, 16AWG, 30KV, CHAMPLAIN ONLY 3239B
4	J4222	1 EA	FASTON RECEPT, 16-14AWG
5	W6128	1 IN	HEAT SHRINK, 1/4" BLACK
6	W444	25 IN	WIRE, 16AWG, 30KV, CHAMPLAIN ONLY 3239B



POS	WIRE	USE	WIRE ITEM	CONTACT ITEM
1	WHITE	LAMP	3	2
2	N/A	NOT USED	N/A	N/A
3	WHITE	LAMP	6	2

**1.1.29 Ballast Power Out Cable Assembly, Remote Version
7091B7010**

NO.	PART NO.	QTY	DESCRIPTION
1	J6493	1 EA	PLUG HOUSING, MNLOK 4 POS
2	J6571	2 EA	CONTACT SOCKET, 20AWG, TIN MNLOK
3	W440	22 IN	WIRE, 16AWG, 600V, 105°C, PVC BLK UL1015
4	W439	26 IN	WIRE, 16AWG, 600V, 105°C, PVC WHT UL1015
5	J4222	1 EA	RCPT, 1/4" FASTON, 16-14AWG (LOOSE)



Chapter 2 Head and Remote Head Assemblies

2.1 Parts

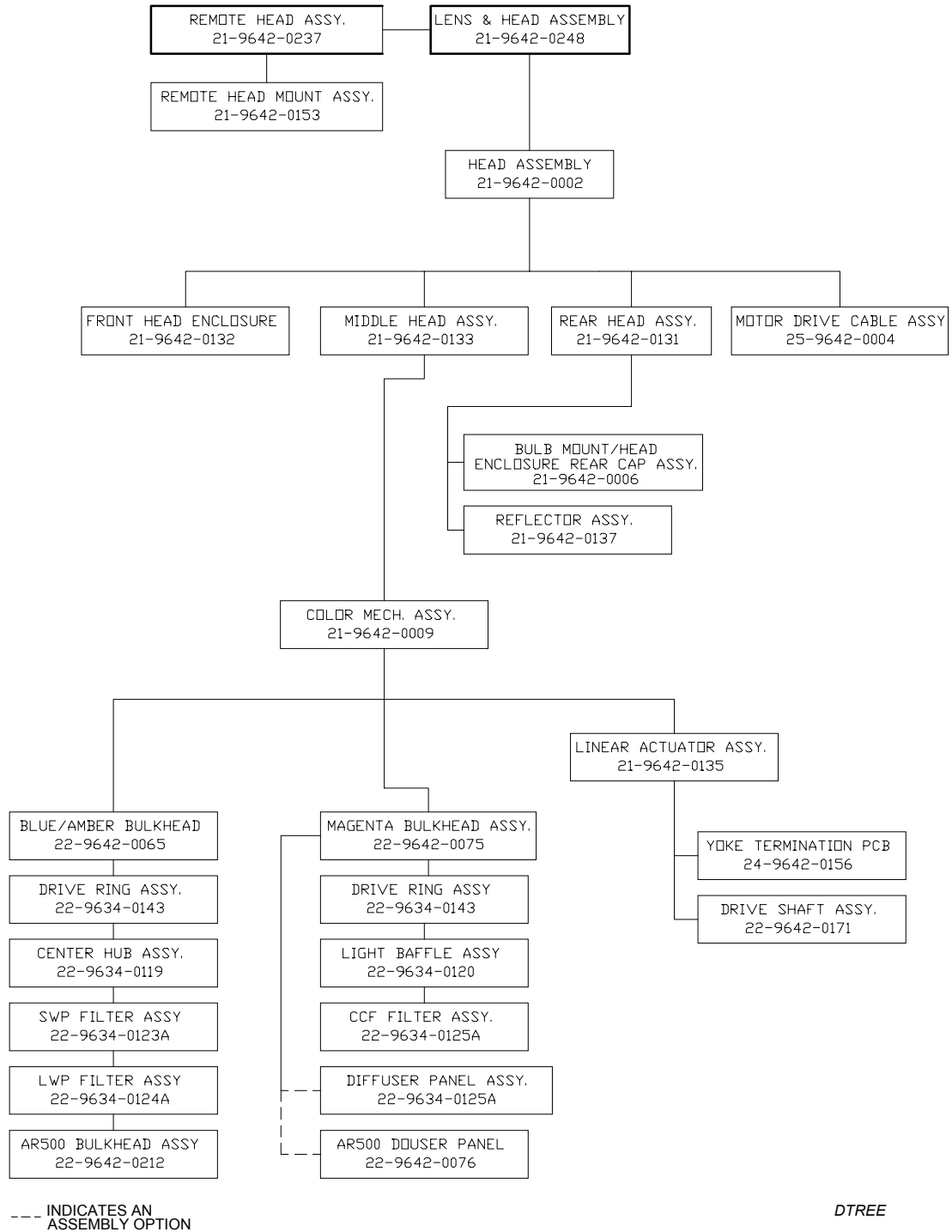


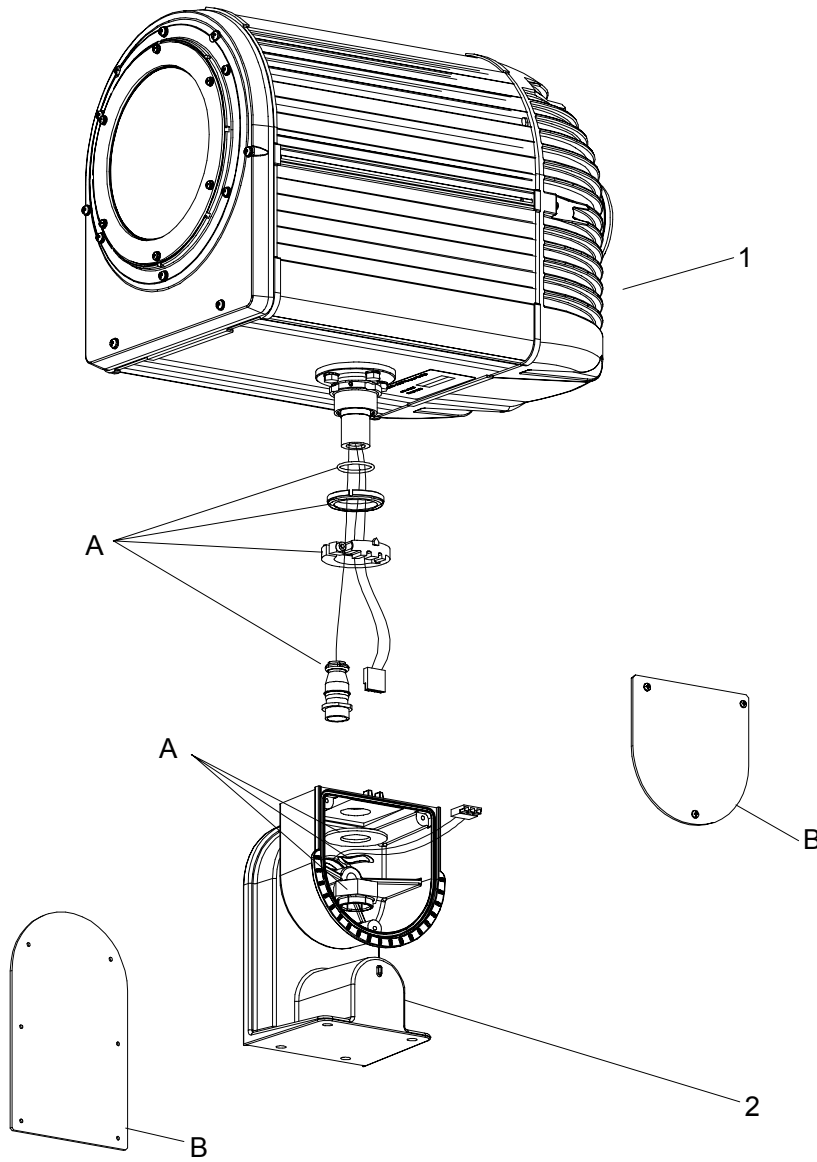
Figure 2-1 - Head and Remote Head Assembly Drawing Tree

**2.1.1 Remote Head Assembly
7091A2016**

NO.	VER	PART NO.	QTY	DESCRIPTION
1	01	7091A2018-01	1 EA	HEAD ASSEMBLY, AR500, DIFFUSER, CLEAR LENS
1	02	7091A2018-02	1 EA	HEAD ASSEMBLY, AR500, DIFFUSER, LIGHT STIPPLE LENS
1	03	7091A2018-03	1 EA	HEAD ASSEMBLY, AR500, DIFFUSER, 8 ROW LENS
1	04	7091A2018-04	1 EA	HEAD ASSEMBLY, AR500, DIFFUSER, 10 ROW LENS
1	05	7091A2018-05	1 EA	HEAD ASSEMBLY, AR500, DIFFUSER, 12 ROW LENS
1	06	7091A2018-06	1 EA	HEAD ASSEMBLY, AR500, DIFFUSER, BUXOM LENS
1	07	7091A2018-07	1 EA	HEAD ASSEMBLY, AR500, DOUSER, CLEAR LENS
1	08	7091A2018-08	1 EA	HEAD ASSEMBLY, AR500, DOUSER, LIGHT STIPPLE LENS
1	09	7091A2018-09	1 EA	HEAD ASSEMBLY, AR500, DOUSER, 8 ROW LENS
1	10	7091A2018-10	1 EA	HEAD ASSEMBLY, AR500, DOUSER, 10 ROW LENS
1	11	7091A2018-11	1 EA	HEAD ASSEMBLY, AR500, DOUSER, 12 ROW LENS
1	12	7091A2018-12	1 EA	HEAD ASSEMBLY, AR500, DOUSER, BUXOM LENS
2	01-12	7091A2014	1 EA	REMOTE HEAD MOUNT ASSEMBLY, AR500
NS	01-12	HW7103	1 EA	CABLE TIE, BLACK
A	01-12			PART OF HEAD ASSEMBLY (7091A2001-1)
B	01-12			PART OF REMOTE MOUNT ASSEMBLY (7091A2014)

NS - Indicates item is not shown.

2.1.1 Remote Head Assembly, (Continued)
7091A2016-01

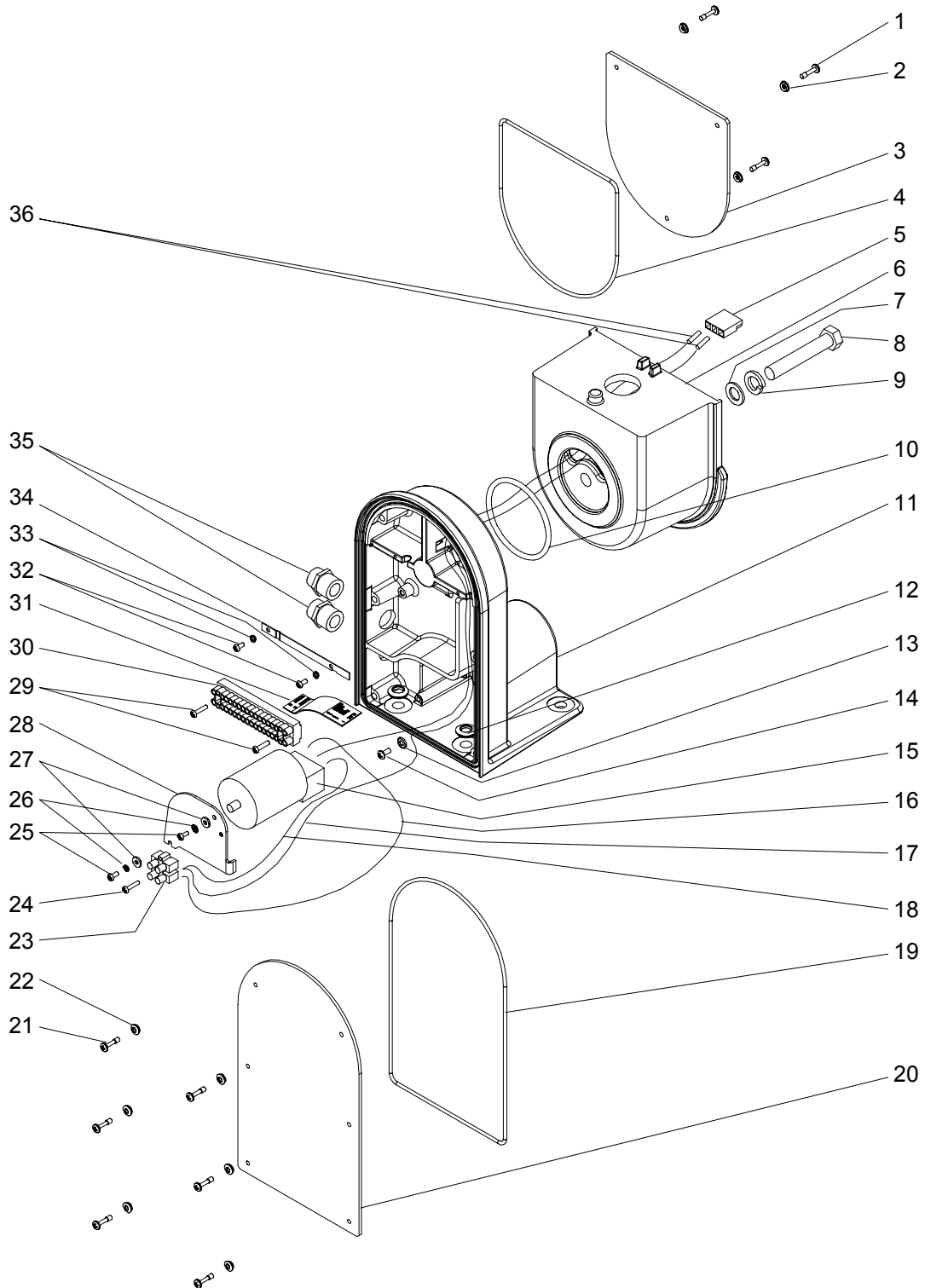


*VERSION TABLE	
VER.	DESCRIPTION
01	DIFFUSER, CLEAR LENS
02	DIFFUSER, LIGHT STIPPLE LENS
03	DIFFUSER, 8 ROW LENT. LENS
04	DIFFUSER, 10 ROW LENT. LENS
05	DIFFUSER, 12 ROW LENT. LENS
06	DIFFUSER, BUXOM LENS
07	DOUSER, CLEAR LENS
08	DOUSER, LIGHT STIPPLE LENS
09	DOUSER, 8 ROW LENT. LENS
10	DOUSER, 10 ROW LENT. LENS
11	DOUSER, 12 ROW LENT. LENS
12	DOUSER, BUXOM LENS

**2.1.2 Remote Head Mount Assembly
7091A2014**

NO.	PART NO.	QTY	DESCRIPTION
1	HW3127	3 EA	SCREW, 8-32X1/2"PPSS
2	HW3150	3 EA	WASHER, #8 SEALING BONDED NEOPRENE, SS
3	7091A3025	1 EA	COVER, TOP, REMOTE HEAD MOUNT
4	7091A3025	1 EA	GASKET, TOP, AR500 REMOTE HEAD MOUNT
5	J768	1 EA	CONN HOUSING, 30 SERIES, W/O FLNGS, 3 POS
6	7091A3039	1 EA	MOUNT, TOP, REMOTE HEAD, CASTING, AR500
7	HW5241	1 EA	WASHER, LOCK, 1/2" SS
8	HW5246	1 EA	SCREW, 1/2-13X3" HEX HD GRADE 8
9	HW5240	1 EA	WASHER, 1/2" FLAT, SS, AN960C816
10	HW6173	1 EA	O-RING, VITON, 3-1/4"ODX2-7/8ID
11	7091A3040	1 EA	MOUNT, BOTTOM, REMOTE HEAD, CASTING, AR500
12	HW5241	2 EA	WASHER, 3/8" SEALING BONDED NEOPRENE, SS
13	HW3147	1 EA	WASHER, #8, CUPPED BRASS
14	HW3132	1 EA	SCREW, 8-32X3/8PPZ W/GREEN PLATING
15	L191	1 EA	IGNITOR, 230V, 50/60HZ
16	W440	8.5 IN	WIRE, 16 AWG, 600 V, 105°C PVC BLK UL1015
17	W443	36 IN	WIRE, 16 AWG, 250°C, 25KVDC, TEFLON, UL1911
18	W439	9.5 IN	WIRE, 16 AWG, 600 V, 105°C PVC WHT UL1015
19	7091A3056	1 EA	GASKET, BOTTOM, AR500 REMOTE HEAD MOUNT
20	7091A3024	1 EA	COVER, BOTTOM, REMOTE HEAD MOUNT
21	HW3127	6 EA	SCREW, 8-32X1/2"PPSS
22	HW3150	6 EA	WASHER, #8 SEALING BONDED NEOPRENE, SS
23	J3321	1 EA	TERMINAL STRIP, 300V, 12 AWG, 20A, 2 POS
24	HW2190	1 EA	SCREW, 6-32X5/8"PPSS
25	HW2185	2 EA	SCREW, 6-32X5/16"PPSS
26	HW2218	2 EA	WASHER, SPLIT LOCK, #6 SS
27	HW2214	2 EA	WASHER, FLAT, #6 SS
28	7091A3032	1 EA	PLATE, IGNITOR MOUNTING, AR500 REMOTE
29	HW2185	2 EA	SCREW, 6-32X5/8"PPSS
30	J3320	1 EA	TERM STRIP, 16 POLE CONTACT
31	7091A4008	1 EA	LABEL, AR500 REMOTE WIRING
32	HW2185	2 EA	SCREW, 6-32X5/16"PPSS
33	J3320	2 EA	WASHER, SPLIT LOCK, #6 SS
34	7091A3047	1 EA	CLIP, CORD RETAINING, AR500 REMOTE
35	J297	2 EA	COMM, CORD, HUBBELL #1017
36	J4217	2 EA	CRIMP CONTACT, S30 TIN

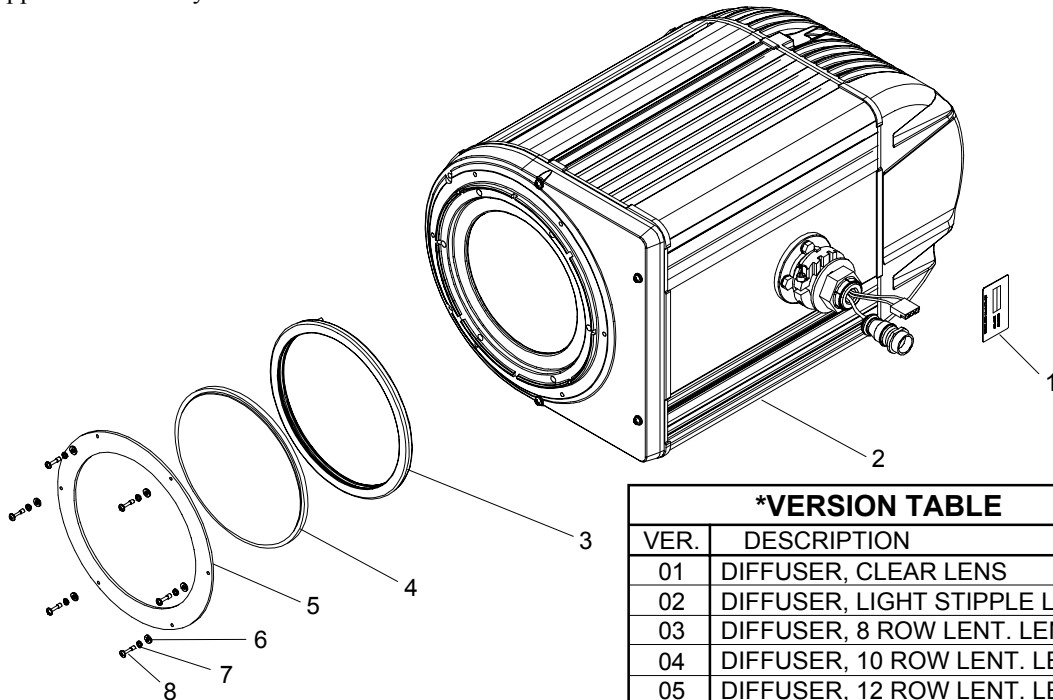
**2.1.2 Remote Head Mount Assembly (Cont'd)
7091A2014**



**2.1.3 Lens and Head Assembly
7091A2018-01 Thru -12**

NO.	VER	PART NO.	QTY	DESCRIPTION
1	01-12	7091A4001	1 EA	LABEL, AR500, ID TAG
2	01-06	7091A2001-1	1 EA	HEAD ASSEMBLY, W/DIFFUSER, AR500
2	07-12	7091A2001-2	1 EA	HEAD ASSEMBLY, W/DOUSER, AR500
3	01-12	7091A2037	*	LENS GASKET, AR500
4	01,07	OP2001	1 EA	LENS, CLEAR (VERY NARROW)
4	02,08	OP2002	1 EA	LENS, LIGHT STIPPLE (NARROW)
4	03,09	OP2003	1 EA	LENS, 8 ROW LENT. (NARROW FLOOD)
4	04,10	OP2004	1 EA	LENS, 10 ROW LENT. (MEDIUM FLOOD)
4	05,11	OP2005	1 EA	LENS, 12 ROW LENTICULAR (WIDE FLOOD)
4	06,12	OP2006	1 EA	LENS, BUXOM (VERY WIDE FLOOD)
5	01-12	7091A3043	*	LENS GASKET CLAMP
6	01-12	HW3138	*	WASHER, FLAT #8SS
7	01-12	HW3146	*	WASHER, SPLIT LOCK, #8SS
8	01-12	HW3129	*	SCREW, #8-32X11/16" CAPTIVE PPSS

* Items supplied in assembly 7091A2008

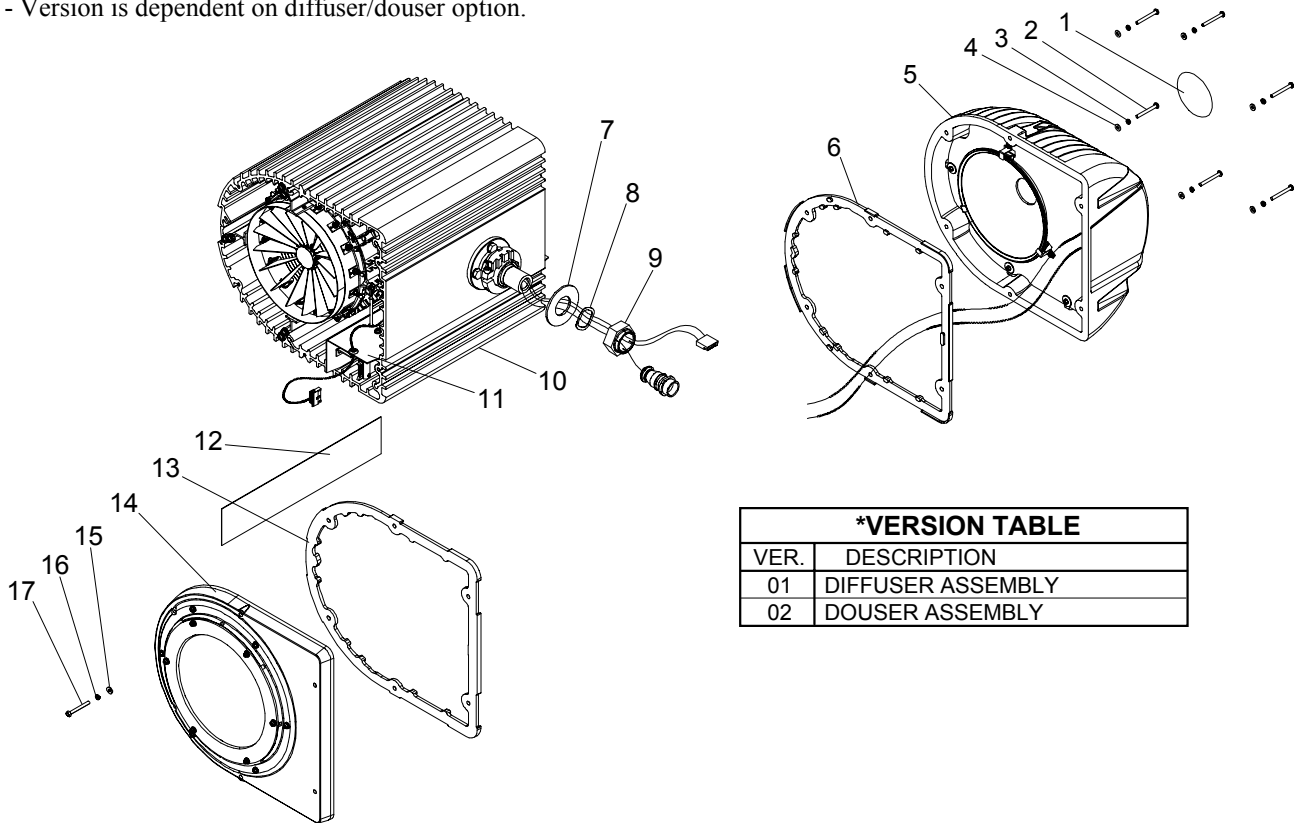


VER.	DESCRIPTION
01	DIFFUSER, CLEAR LENS
02	DIFFUSER, LIGHT STIPPLE LENS
03	DIFFUSER, 8 ROW LENT. LENS
04	DIFFUSER, 10 ROW LENT. LENS
05	DIFFUSER, 12 ROW LENT. LENS
06	DIFFUSER, BUXOM LENS
07	DOUSER, CLEAR LENS
08	DOUSER, LIGHT STIPPLE LENS
09	DOUSER, 8 ROW LENT. LENS
10	DOUSER, 10 ROW LENT. LENS
11	DOUSER, 12 ROW LENT. LENS
12	DOUSER, BUXOM LENS

2.1.4 Head Assembly 7091A2001-1 and 70091A2001-2

NO.	REV	PART NO.	QTY	DESCRIPTION
1	01,02	7091A4005	1 EA	LABEL, AR500 RELAMPING (GRAY)
2	01,02	HW425	6 EA	SCREW, 1-32X1-3/4"PPSS
3	01,02	HW4137	6 EA	WASHER, 10-32X1-3/4"PPSS
4	01,02	HW4141	6 EA	WASHER, FLAT, #10SS
5	01,02	7091A2007	1 EA	REAR HEAD ASSEMBLY, AR500
6	01,02	7091A4088	1 EA	MOLDED HEAD GASKET
7	01,02	HW5255	1 EA	FLAT WASHER, 1-5/16"IDX2-3/4"ODX0.125"T, SS
8	01,02	HW7111	1 EA	WASHER, SPRING WAVE
9	01,02	7091A3061	1 EA	AR500 TILT TUBE LOCK NUT, 1-1/4-12 UNF-2B
*10	01	7091A2009-1	1 EA	MIDDLE HEAD ASSEMBLY, AR500
*10	02	7091A2009-2	1 EA	MIDDLE HEAD ASSEMBLY, AR500
11	01,02	7091B7004	1 EA	MOTOR DRIVE CABLE ASSEMBLY
12	01,02	7091A4013	1 EA	NAMEPLATE, AR500 HEAD (GRAY), IRIDEON
13	01,02	7091A4088	1 EA	MOLDED HEAD GASKET
14	01,02	7091A2008	1 EA	FRONT HEAD ASSEMBLY, AR500
15	01,02	HW4141	6 EA	WASHER, FLAT, #10SS
16	01,02	HW4137	6 EA	WASHER, 10-32X1-3/4"PPSS
17	01,02	HW4125	6 EA	SCREW, 1-32X1-3/4"PPSS

* - Version is dependent on diffuser/douser option.



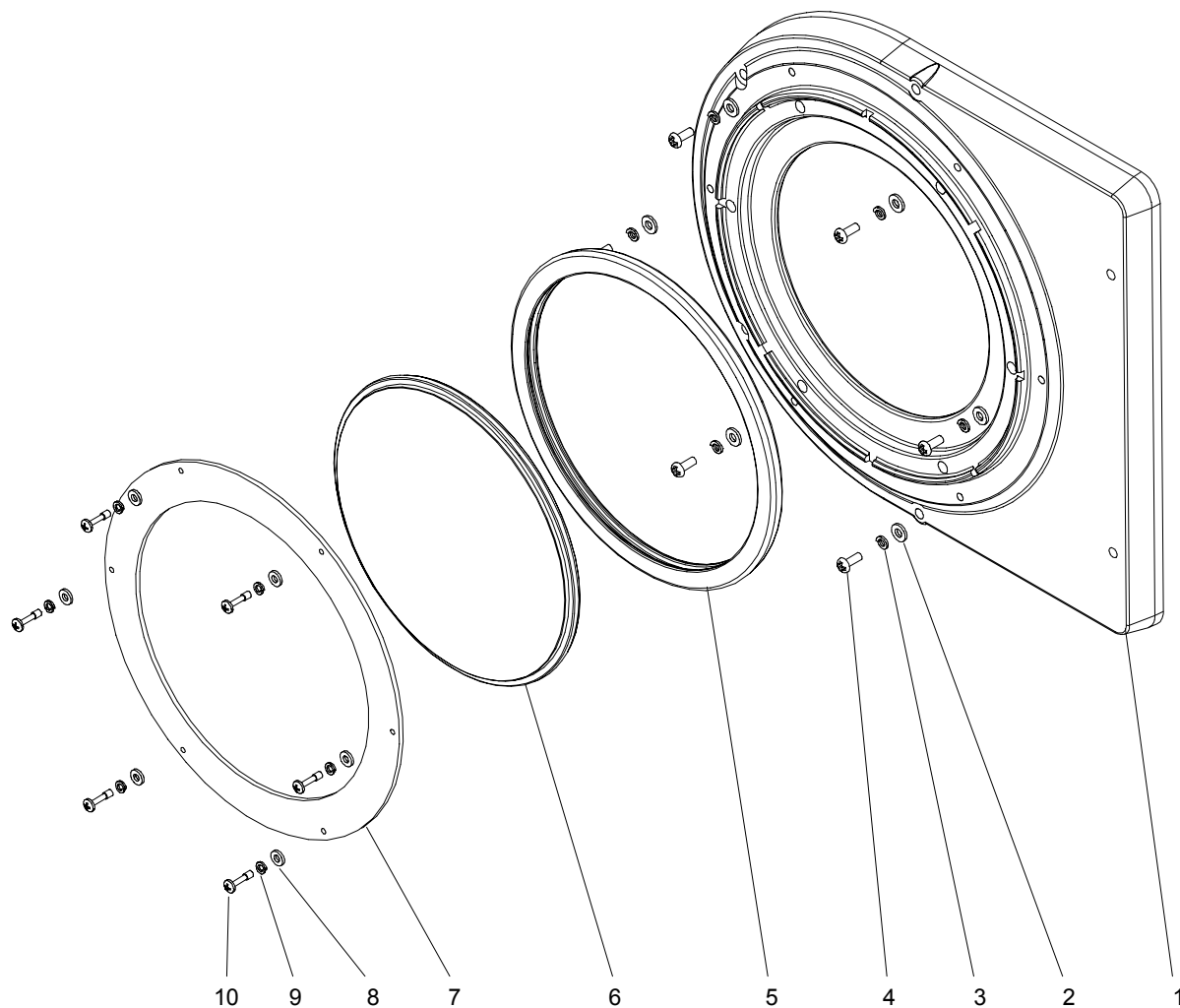
VER.	DESCRIPTION
01	DIFFUSER ASSEMBLY
02	DOUSER ASSEMBLY

**2.1.5 Front Head Enclosure Assembly
7091A2008**

NO.	PART NO.	QTY	DESCRIPTION
1	7091A3062	1 EA	FRONT HEAD ENCLOSURE, AR500
2	HW4141	6 EA	WASHER, FLAT, #10 SS
3	55-6623-0010	6 EA	WASHER, SPLIT LOCK, #10 SS 7/16"OD 0.04 THK
4	HW4121	6 EA	SCREW, #10-32X1/2"PPSS
5	7091A2037	1 EA	LENS GASKET
6	OP2001	*	LENS, CLEAR (VERY NARROW)
6	OP2002	*	LENS, LIGHT STIPPLE (NARROW)
6	OP2003	*	LENS, 8 ROW LENTICULAR (NARROW FLOOD)
6	OP2004	*	LENS, 10 ROW LENTICULAR (MEDIUM FLOOD)
6	OP2005	*	LENS, 12 ROW LENTICULAR (WIDE FLOOD)
6	OP2006	*	LENS, BUXOM (VERY WIDE FLOOD)
7	7091A3043	1 EA	LENS GASKET CLAMP
8	HW3138	6 EA	WASHER, FLAT #8SS
9	HW3146	6 EA	WASHER, SPLIT LOCK, #8SS
10	HW3129	6 EA	SCREW, #8-32X11/16" CAPTIVE PPSS

* Items are supplied in assembly 7091A2018-1.

2.1.5 Front Head Enclosure Assembly (Cont'd)
7091A20008



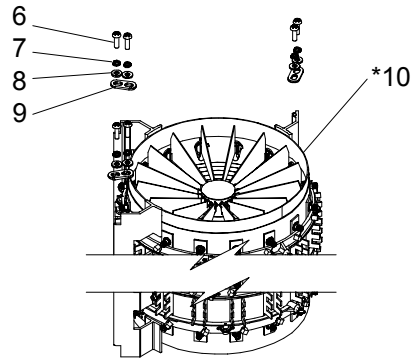
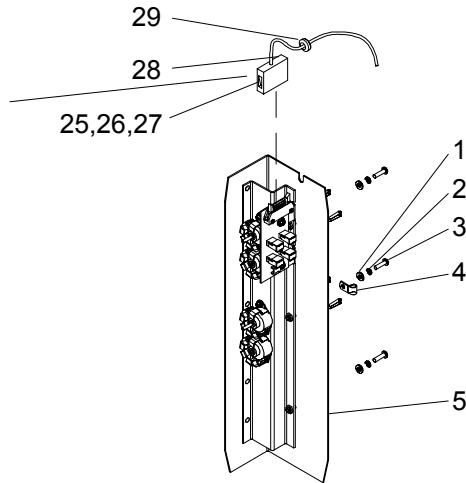
**2.1.6 Middle Head Enclosure Assembly
7091A2009-1**

NO.	VER	PART NO.	QTY	DESCRIPTION
1	01,02	HW3138	3 EA	WASHER, FLAT, #8SS
2	01,02	HW3146	3 EA	WASHER, SPLIT LOCK, #8SS
3	01,02	HW3128	3 EA	SCREW, 8-32X5/8"PPSS
4	01,02	HW6183	1 EA	CLIP, J RETAINING Ø 0.187
5	01,02	7091A2010	1 EA	LINEAR ACTUATOR ASSEMBLY, AR500
6	01,02	HW4122	6 EA	SCREW, 10-32X5/8"PPSS
7	01,02	HW4137	6 EA	SPLIT LOCKWASHER, #10SS, 7/16"OD X 0.04"THK
8	01,02	HW4141	6 EA	WASHER, FLAT, #10SS
9	01,02	7091A3022	3 EA	COLOR MECHANISM LOCATING BRACKET
*10	01	7091A2004-1	1 EA	COLOR MECHANISM ASSEMBLY, DIFFUSER, AR500
*10	02	7091A2004-2	1 EA	COLOR MECHANISM ASSEMBLY, DOUSER, AR500
11	01,02	HW6179	4 EA	O-RING, SILICONE, 1/2"OD X 3/8"ID X 1/16"THK
12	01,02	HW6174	1 EA	O-RING, VITON, 1-5/8"OD X 1-3/8"ID X 1/8"THK
13	01,02	7091A3026	1 EA	TILT TUBE, AR500, VERSION 3
14	01,02	HW9226	1 EA	SPRING PIN, 1/8"OD X 3/8"L. 302 SS
15	01,02	HW6174	1 EA	O-RING, VITON, 1-5/8"OD X 1-3/8"ID X 1/8"THK
16	01,02	7091A3049	1 EA	TILT TUBE ANGLE INDICATOR RING
17	01,02	7091A4014	1 EA	TILT TUBE ANGLE INDICATOR LABEL
18	01,02	7091A3030	1 EA	TILT TUBE CLAMP
19	01,02	HW5247	1 EA	SCREW, 1/4-28 X 1"SCSS
20	01,02	53-9639-0005	4 EA	WASHER, FLAT, 3/8"SS, AN960-C616
21	01,02	HW5242	4 EA	SCREW, 3/8-16 X 1-1/4"HHDS
22	01,02	HW5256	4 EA	WASHER, FLAT, 0.406ID X 0.812OD X 0.08THK
23	01,02	HW5237	4 EA	NUT, 3/8-16, LOCK, SS
24	01,02	7091A2032	1 EA	HEAD ENCLOSURE, SIDES, AR500, PRODUCTION
25	01,02	J6476	1 EA	RECEPT, 22AWG, 16 POSITION, DBL ROW, MT
26	01,02	J6475	1 EA	COVER, EJECTION, 16 POSITION, MT
27	01,02	J6474	1 EA	COVER, BACK, 16 POSITION, MT
28	01,02	W6130	4 IN	HEAT SHRINK, 3/8" BLACK
29	01,02	HW6169	1 EA	GROMMET, 9/32IDX9/16ODX1/4T, SILICONE RED

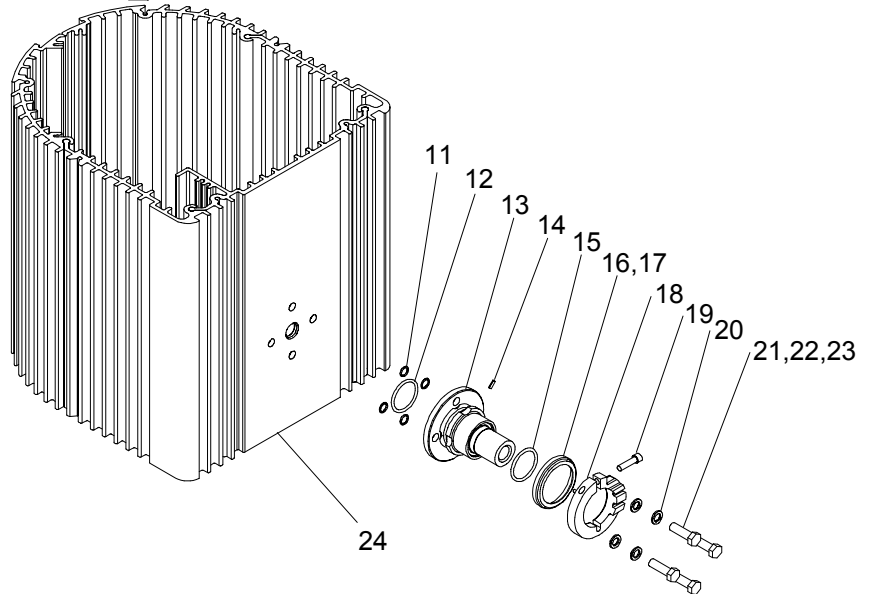
* - Version is dependent on diffuser/douser option.

2.1.6 Middle Head Enclosure Assembly 7091A2009-1 and 7091A2009-02

WIRE ASSIGNMENTS	
COLOR CODE	POS
BLACK	1
WHITE	2
RED	3
GREEN	4
ORANGE	5
BLUE	6
WHITE/BLACK STRIPE	7
RED/BLACK STRIPE	8
GREEN/BLACK STRIPE	9
ORANGE/BLACK STRIPE	10
BLUE/BLACK STRIPE	11
BLACK/WHITE STRIPE	12
RED/WHITE STRIPE	13
GREEN/WHITE STRIPE	14
BLUE/WHITE STRIPE	15
BLACK/RED STRIPE	16



*VERSION TABLE	
VER.	DESCRIPTION
01	DIFFUSER ASSEMBLY
02	DOUSER ASSEMBLY



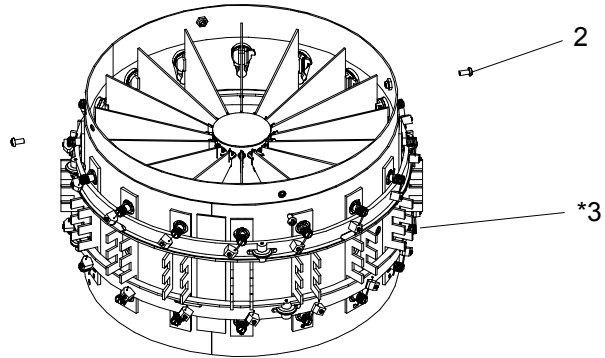
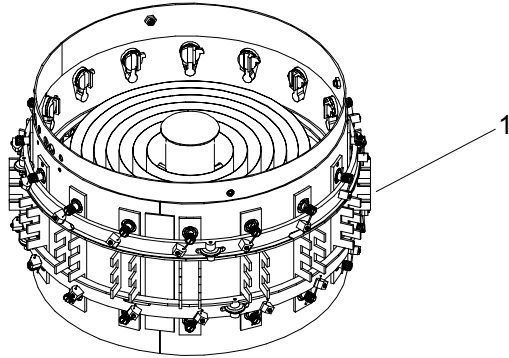
* - Version is dependent on diffuser/douser option.

**2.1.7 Color Mechanism Assembly
7091A2004-1 and 7091A2004-2**

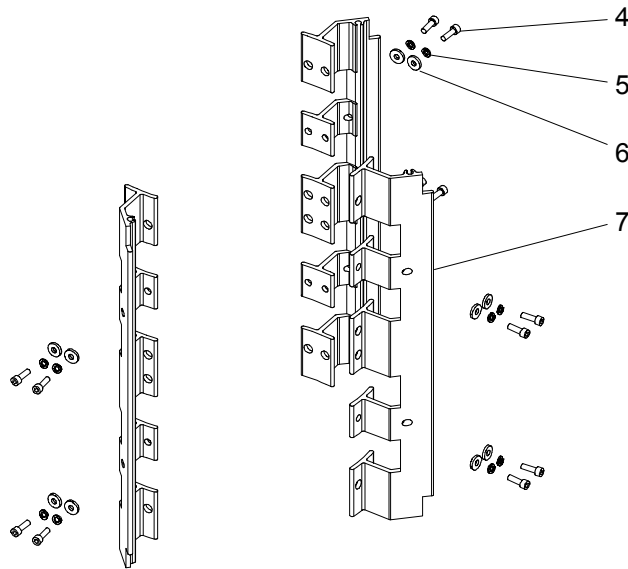
NO.	VER	PART NO.	QTY	DESCRIPTION
1	01,02	7091A2031	1 EA	AR500 BLUE/AMBER BULKHEAD ASSEMBLY
2	01,02	HW1145	4 EA	SCREW, #4-40X1/4"PPSS
*3	01	7091A2033-1	1 EA	AR500 MAGENTA BULKHEAD ASSEMBLY, DIFFUSER
*3	02	7091A2033-2	1 EA	AR500 MAGENTA BULKHEAD ASSEMBLY, DOUSER
4	01,02	HW2207	12 EA	SCREW, #6-32X7/16"SCZ
5	01,02	HW2218	12 EA	WASHER, SPLIT LOCK, #6SS
6	01,02	HW2214	12 EA	WASHER, FLAT, #6SS
7	01,02	7091A3021	3 EA	COLOR MECHANISM MOUNTING BRACKET

* - Version is dependent on diffuser/douser option.

**2.1.7 Color Mechanism Assembly (Continued)
7091A2004-1 and 7091A2004-2**



*VERSION TABLE	
VER.	DESCRIPTION
01	DIFFUSER ASSEMBLY
02	DOUSER ASSEMBLY

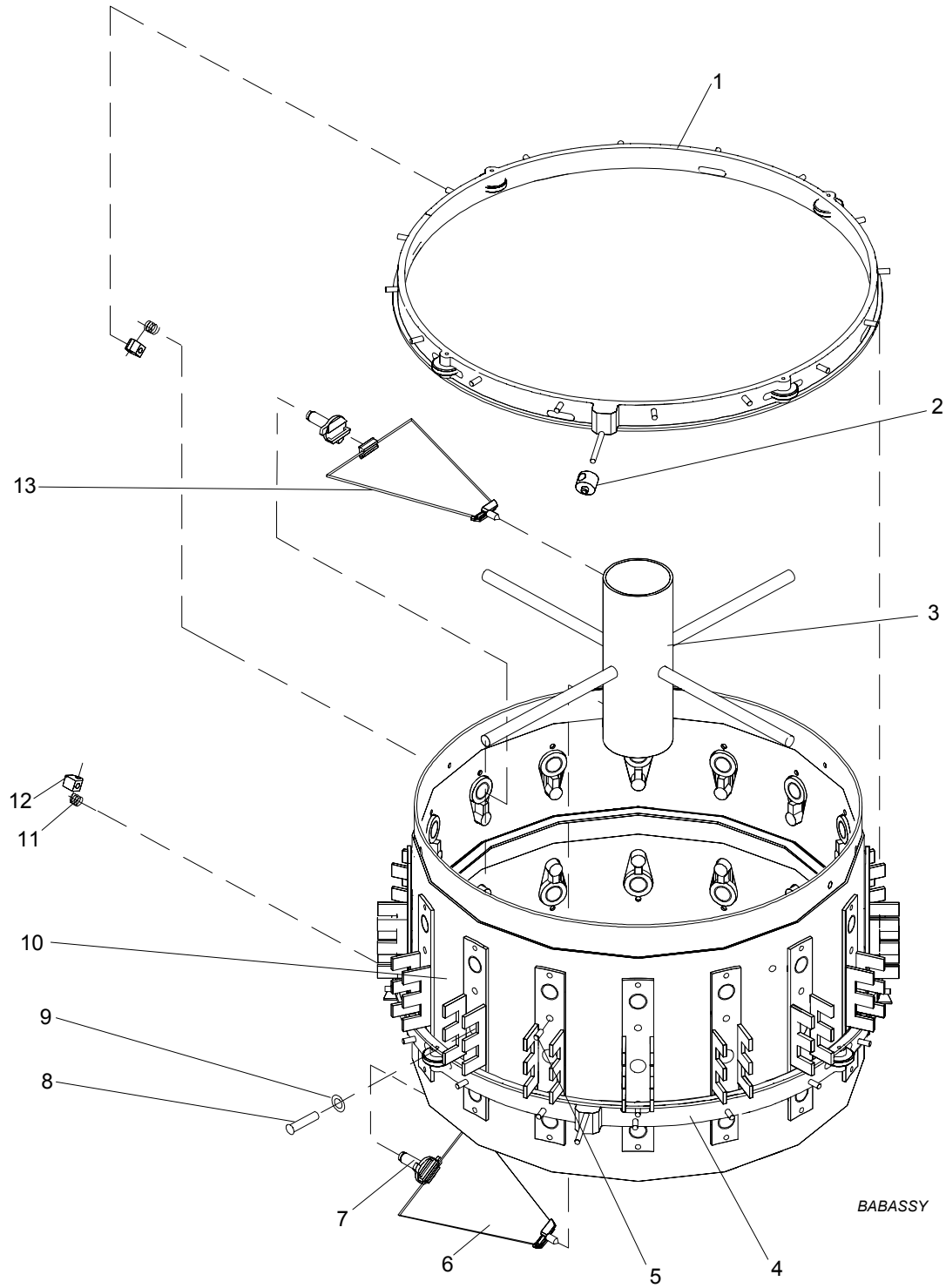


* - Version is dependent on diffuser/douser option.

**2.1.8 Blue/Amber Bulkhead Assembly
7091A2031 22-9642-0065**

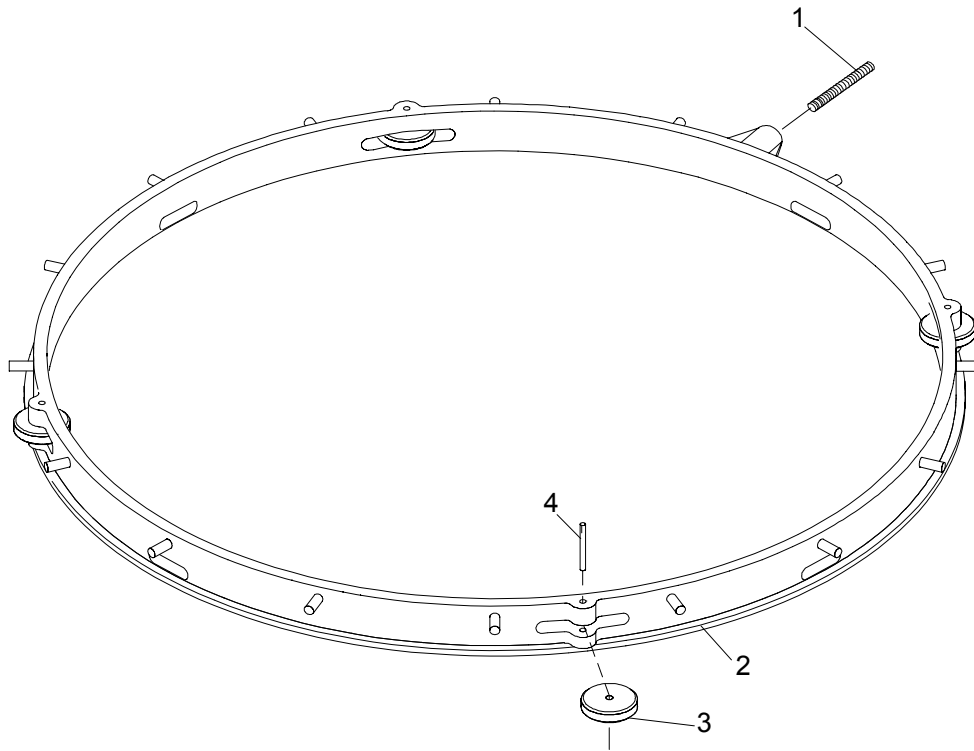
NO.	PART NO.	QTY	DESCRIPTION
1	7090A2023	1 EA	DRIVE RING ASSEMBLY
2	7090A3009	2 EA	SWIVEL LINK
3	7090A2017	1 EA	CENTER HUB ASSEMBLY
4	7090A2023	1 EA	DRIVE RING ASSEMBLY
5	HW7114	8 EA	PIN, 1/8"OD X 3/8"L TYPE-H, AL606-T6, DRIVE-LOK
6	7090A2019	16 EA	SWP FILTER (BLUE) ASSEMBLY
7	7090A3005	32 EA	FILTER CARRIER
8	HW1145	4 EA	SCREW, #4-40X1/4"PPSS
9	HW1165	4 EA	WASHER, INT TOOTH, #4 SS
10	7091A2045	1 EA	AR500 BULKHEAD ASSEMBLY
11	7090A3006	32 EA	DRIVE ARM FILTER SPRING
12	7090A3007	32 EA	DRIVE ARM LINK
13	7090A2020	16 EA	LWP FILTER (AMBER) ASSEMBLY

2.1.8 Blue/Amber Bulkhead Assembly (Continued)
7091A2031



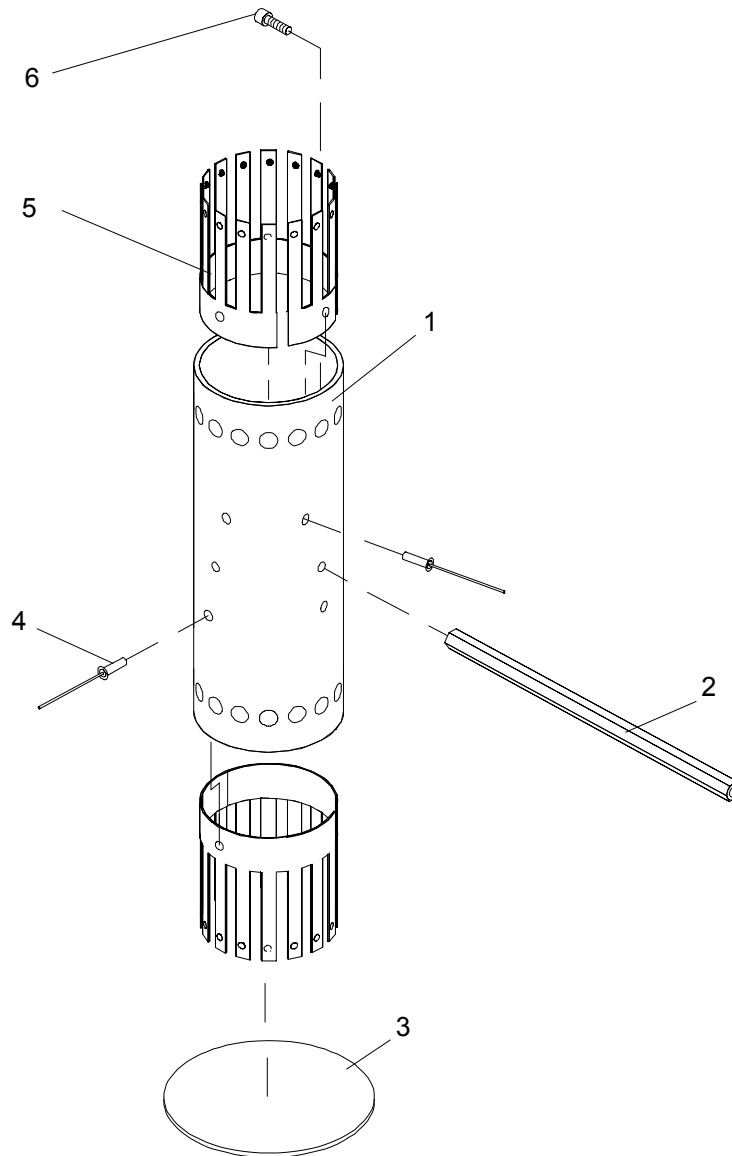
2.1.9 Drive Ring Assembly 7090A2024

NO.	PART NO.	QTY	DESCRIPTION
1	HW1150	1 EA	SCREW, SET, 4-40X7/8"SS FLAT POINT
2	10-9634-0027 E	1 EA	RING, DRIVE
3	10-9634-0044 B	4 EA	ROLLER, DRIVE RING, SM
4	55-6612-0004	4 EA	PIN, 1/16OD X 1/2L, TYPE C, 303S/S



2.1.10 Center Hub Assembly 7090A2017

NO.	PART NO.	QTY	DESCRIPTION
1	10-9634-0028 C	1 EA	HUB, CENTER, BULKHEAD
2	55-6669-0008	4 EA	STANDOFF, 5/32"HEX 4-40X3-5/16"SS BLACK
3	10-9634-0133	1 EA	PLUG, HUB
4	53-6534-0003	8 EA	RIVET, POP, STEEL 3/32OD X 3/32GRIP
5	10-9634-0029 A	2 EA	SPRING, FINGER, FILTER SUPPORT
6	HW1152	4 EA	SCREW, 4-40X1/4"SCSS



2.1.11 SWP Filter (Blue) Assy. 7090A2019

NO.	PART NO.	QTY	DESCRIPTION
1	7090A4013	1 EA	PAD, FILTER, EXTRUSION, SILICONE, WHITE
2	41-9634-0040	1 EA	FILTER, SWP, BLUE
3	7090A3011	1 EA	CARRIER, CENTER FILTER, BLU/AMB/DIFF

2.1.12 LWP Filter Assy. (Amber) 7090A2020

NO.	PART NO.	QTY	DESCRIPTION
1	7090A4013	1 EA	PAD, FILTER, EXTRUSION, SILICONE, WHITE
2	41-9634-0041	1 EA	FILTER, LWP, AMBER
3	7090A3011	1 EA	CARRIER, CENTER FILTER, BLU/AMB/DIFF

2.1.13 CCF Filter Assembly. (Magenta) 7090A2021

NO.	PART NO.	QTY	DESCRIPTION
1	7090A4013	1 EA	PAD, FILTER, EXTRUSION, SILICONE, WHITE
2	41-9634-0042	1 EA	FILTER, COMPLEX COLOR, MAGENTA
3	7090A3012	1 EA	CARRIER, CENTER FILTER, MAGENTA

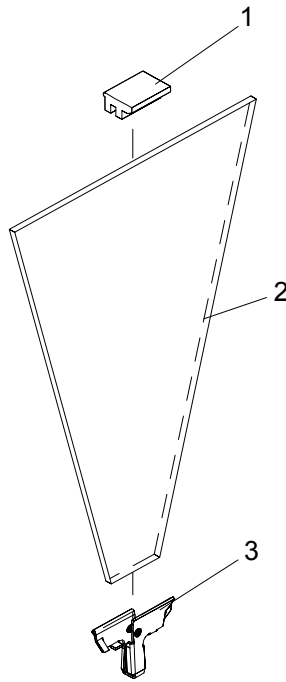
2.1.14 Diffuser Panel Assy. 7090A2022

NO.	PART NO.	QTY	DESCRIPTION
1	7090A4013	1 EA	PAD, FILTER, EXTRUSION, SILICONE, WHITE
2	42-9634-0063	1 EA	PANEL, DIFFUSER
3	7090A3012	1 EA	CARRIER, CENTER FILTER, BLU/AMB/DIFF

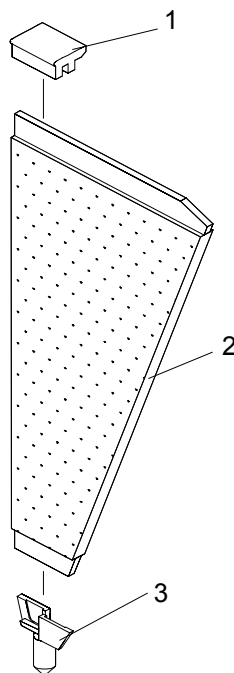
2.1.15 Douser Panel Assembly 7091A2034

NO.	PART NO.	QTY	DESCRIPTION
1	7090A4013	1 EA	PAD, FILTER, EXTRUSION, SILICONE, WHITE
2	7091A3005	1 EA	PANEL, AR500 DIMMER
3	7090A3011	1 EA	CARRIER, CENTER FILTER, BLU/AMB/DIFF

Filter/Diffuser Panel Assemblies (Continued)
7090A2019 through 7090A2022 and
7091A2034
SWP/LWP/CCF Filter

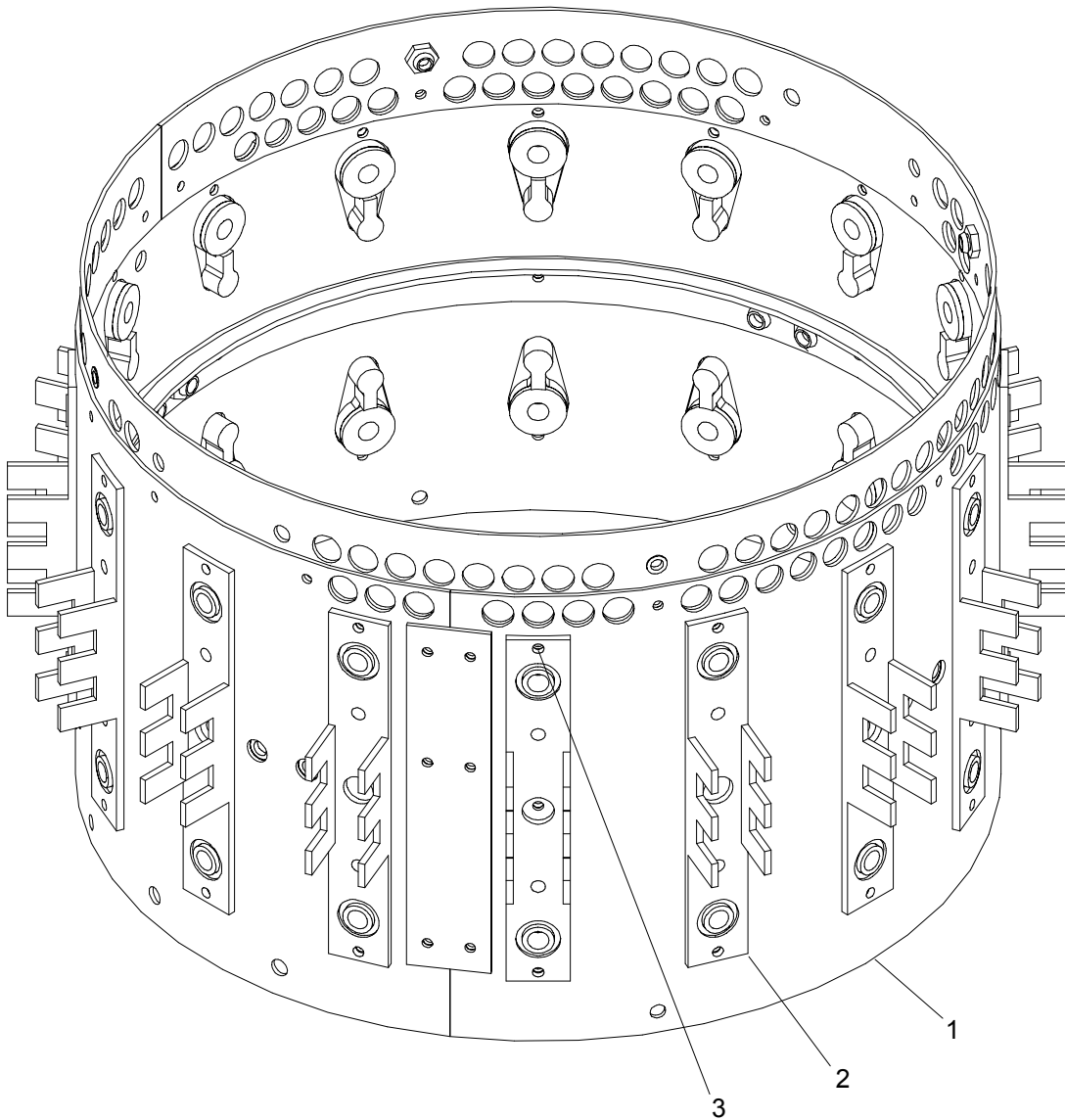


Diffuser/Dimmer Panel



2.1.16 AR500 Color Bulkhead Assembly 7091A2045

NO.	PART NO.	QTY	DESCRIPTION
1	7091A2029	1 EA	AR500 COLOR BULKHEAD, BASIC
2	7090A2024	16 EA	CARRIER BUSHING ASSEMBLY
3	HW797	32 EA	RIVET, FLT HD SOLID AL Ø3/32 (AN442-83-4)



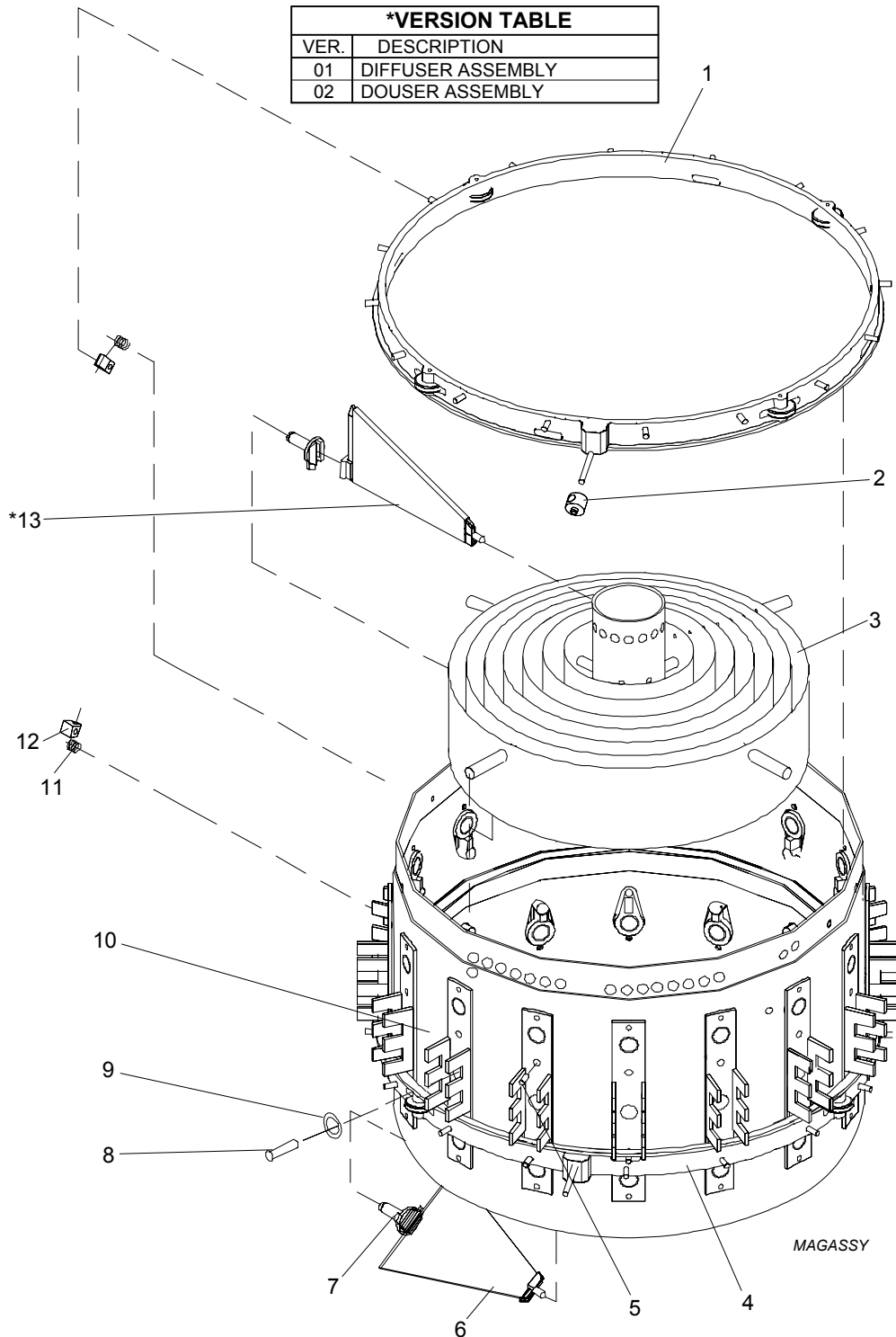
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**2.1.17 AR500 Magenta Bulkhead Assembly
7091A2033-1 and 7091A2033-2**

NO.	VER	PART NO.	QTY	DESCRIPTION
1	01,02	7090A2023	1 EA	DRIVE RING ASSEMBLY
2	01,02	7090A3009	2 EA	SWIVEL LINK
3	01,02	7090A2018	1 EA	LIGHT BAFFLE ASSEMBLY
4	01,02	7090A2023	1 EA	DRIVE RING ASSEMBLY
5	01,02	HW7114	8 EA	PIN, 1/8"OD X 3/8"L TYPE-H, AL606-T6, DRIVE-LOK
6	01,02	7090A2021	16 EA	CCF FILTER (MAGENTA) ASSEMBLY
7	01,02	7090A3005	32 EA	FILTER CARRIER
8	01,02	HW1145	4 EA	SCREW, #4-40X1/4"PPSS
9	01,02	HW1165	4 EA	WASHER, INT TOOTH, #4 SS
10	01,02	7091A2045	1 EA	AR500 BULKHEAD ASSEMBLY
11	01,02	7090A3006	32 EA	DRIVE ARM FILTER SPRING
12	01,02	7090A3007	32 EA	DRIVE ARM LINK
*13	01	7090A2022	1 EA.	ASSY, DIFFUSER PANEL
*13	02	7091A2034	1 EA.	DOUSER PANEL ASSEMBLY, AR500

* - Version is dependent on diffuser/douser option.

**2.1.17 AR500 Magenta Bulkhead Assembly (Continued)
7091A2033-1 and 7091A2003-2**

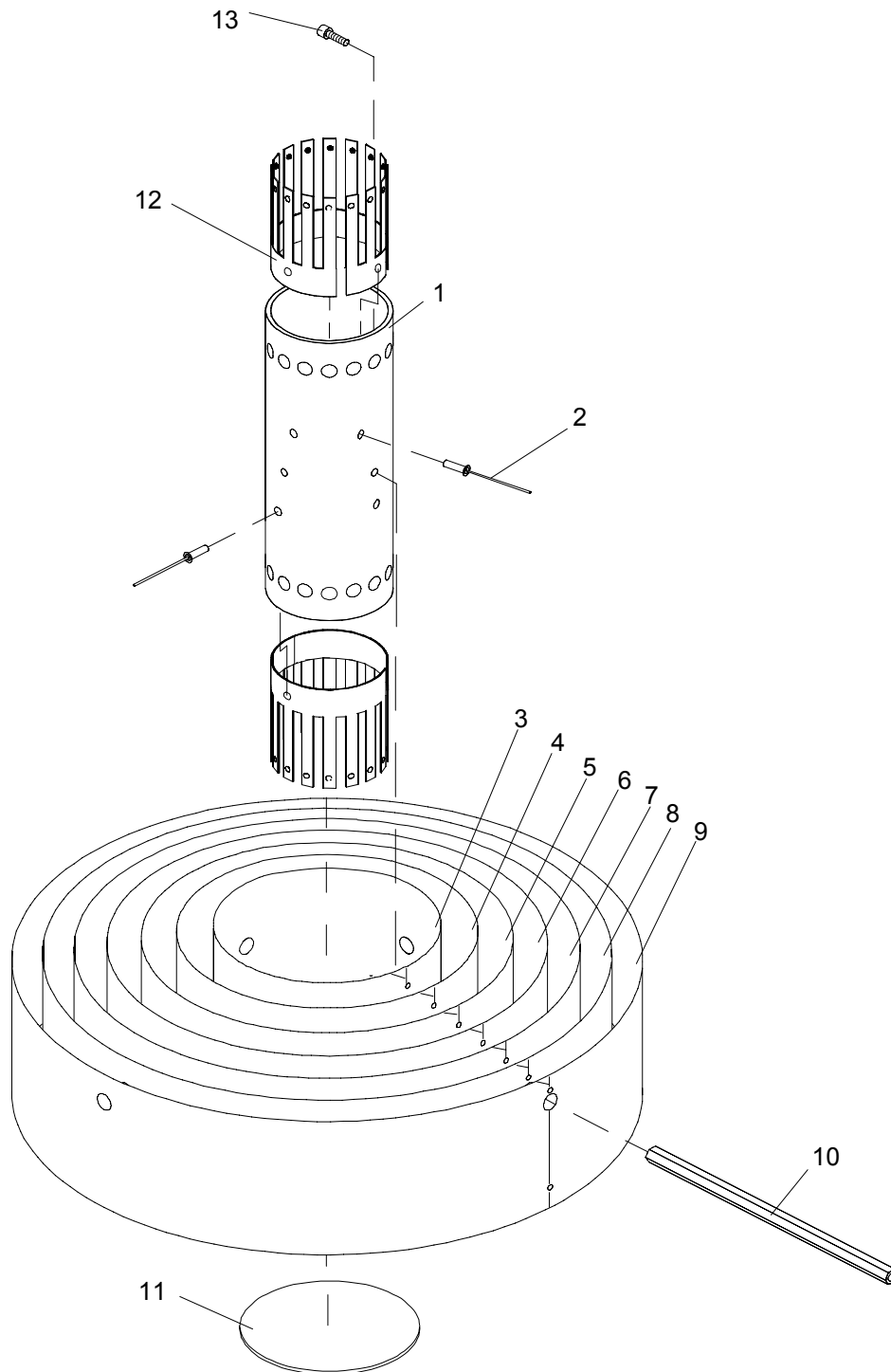


* - Version is dependent on diffuser/douser option.

2.1.18 Light Baffle Assembly 7090A2018

NO.	PART NO.	QTY	DESCRIPTION
1	10-9634-0028 C	1 EA	HUB, CENTER, BULKHEAD
2	53-6534-0003	8 EA	RIVET, POP, STEEL 3/32OD X 3/32GRIP
3	10-9634-0084 B	1 EA	RING, LIGHT BAFFLE, #7
4	10-9634-0083 B	1 EA	RING, LIGHT BAFFLE, #6
5	10-9634-0082 B	1 EA	RING, LIGHT BAFFLE, #5
6	10-9634-0081 B	1 EA	RING, LIGHT BAFFLE, #4
7	10-9634-0080 B	1 EA	RING, LIGHT BAFFLE, #3
8	10-9634-0079 B	1 EA	RING, LIGHT BAFFLE, #2
9	10-9634-0078 B	1 EA	RING, LIGHT BAFFLE, #1
10	55-6669-0008	4 EA	STANDOFF, 5/32"HEX 4-40X3-5/16"SS BLACK
11	10-9634-0133	1 EA	PLUG, HUB
12	10-9634-0029 A	2 EA	SPRING, FINGER, FILTER SUPPORT
13	HW1152	4 EA	SCREW, 4-40X1/4"SCSS

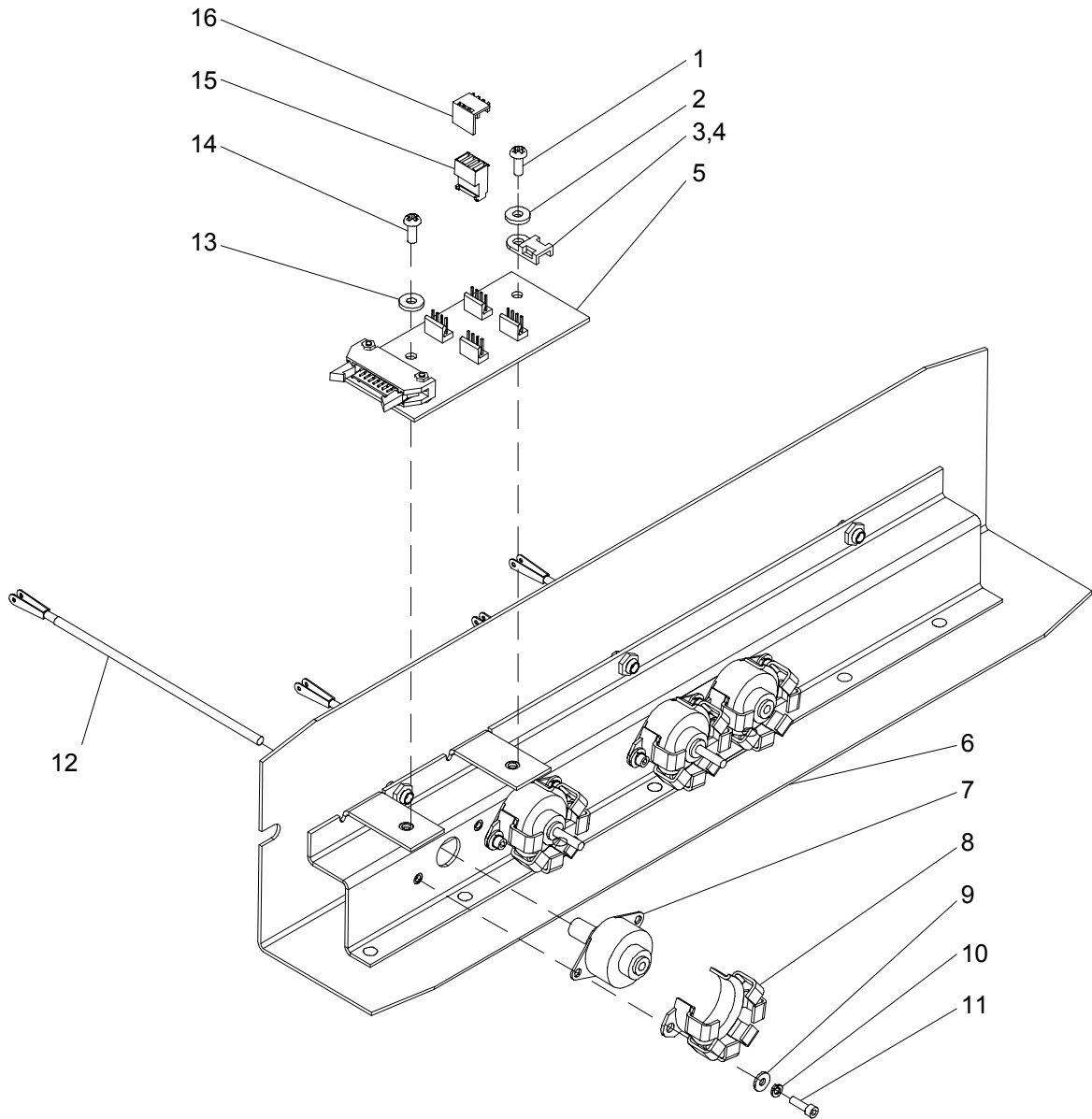
2.1.18 Light Baffle Assembly (Continued) 7090A2018



2.1.19 Linear Actuator Assembly 7091A2010

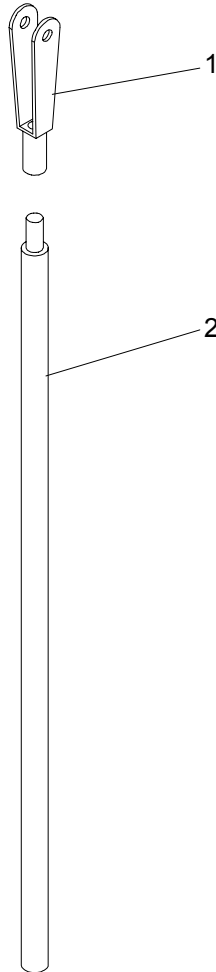
NO.	PART NO.	QTY	DESCRIPTION
1	HW2186	1 EA	SCREW, #6-32X3/8"PPSS
2	HW2214	2 EA	WASHER, FLAT, #6SS
3	HW7107	1 EA	CABLE ANCHOR MOUNT, #8 SCREW MOUNTING
4	HW7102	4 EA	CABLE TIE, SMALL 0.10X4"
5	7091B5003	1 EA	AR500 YOKE TERMINATION BRD, PCB ASSY
6	7091A2035	1 EA	MOUNTING PLATE/HEAT SHIELD, LINEAR ACT
7	B203	4 EA	LINEAR ACTUATOR MOTOR
8	7090A3010	4 EA	ACTUATOR HEAT SINK, MODIFIED
9	HW1163	8 EA	WASHER, FLAT, #4SS
10	HW1164	8 EA	WASHER, SPLIT LOCK, #4SS
11	HW1153	8 EA	SCREW, #4-40X3/8"SCSS
12	7901A2040	4 EA	DRIVE SHAFT, LINEAR ACTUATOR, ASSY
13	HW2214	1 EA	WASHER, FLAT, #6SS
14	HW2185	1 EA	SCREW, #6-32X5/16"PPSS
15	J6502	4 EA	RECEPT, MTA100 W/TAB, GREEN 4 POS
16	J6510	4 EA	COVER, STRAIN RELIEF 4 POS MTA

2.1.19 Linear Actuator Assembly (Continued) 7091A2010



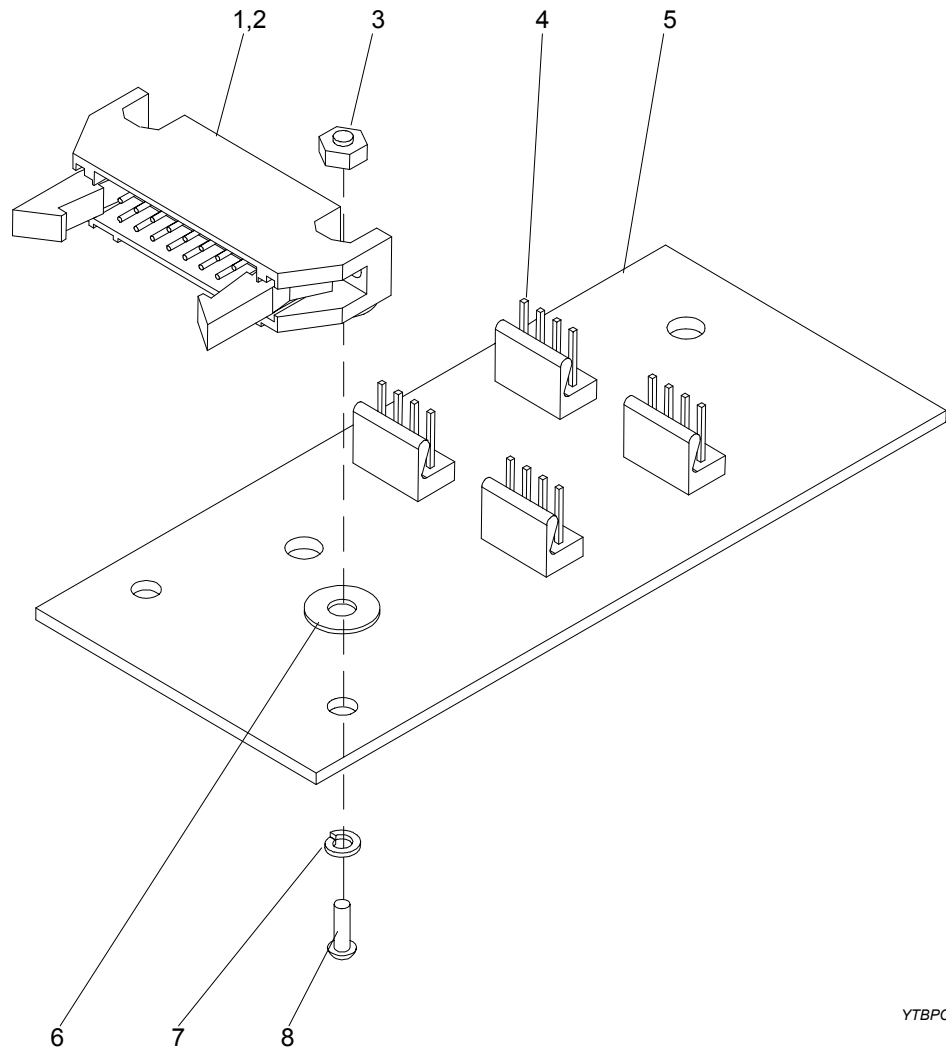
2.1.20 Drive Shaft Assembly 7091A2040

NO.	PART NO.	QTY	DESCRIPTION
1	HW9227	1 EA	LINK, ACTUATOR/DRIVE RING
2	HW9230	1 EA	DRIVE SHAFT, LINEAR ACTUATOR



2.1.21 Yoke Termination PCB Assembly 7091B5003

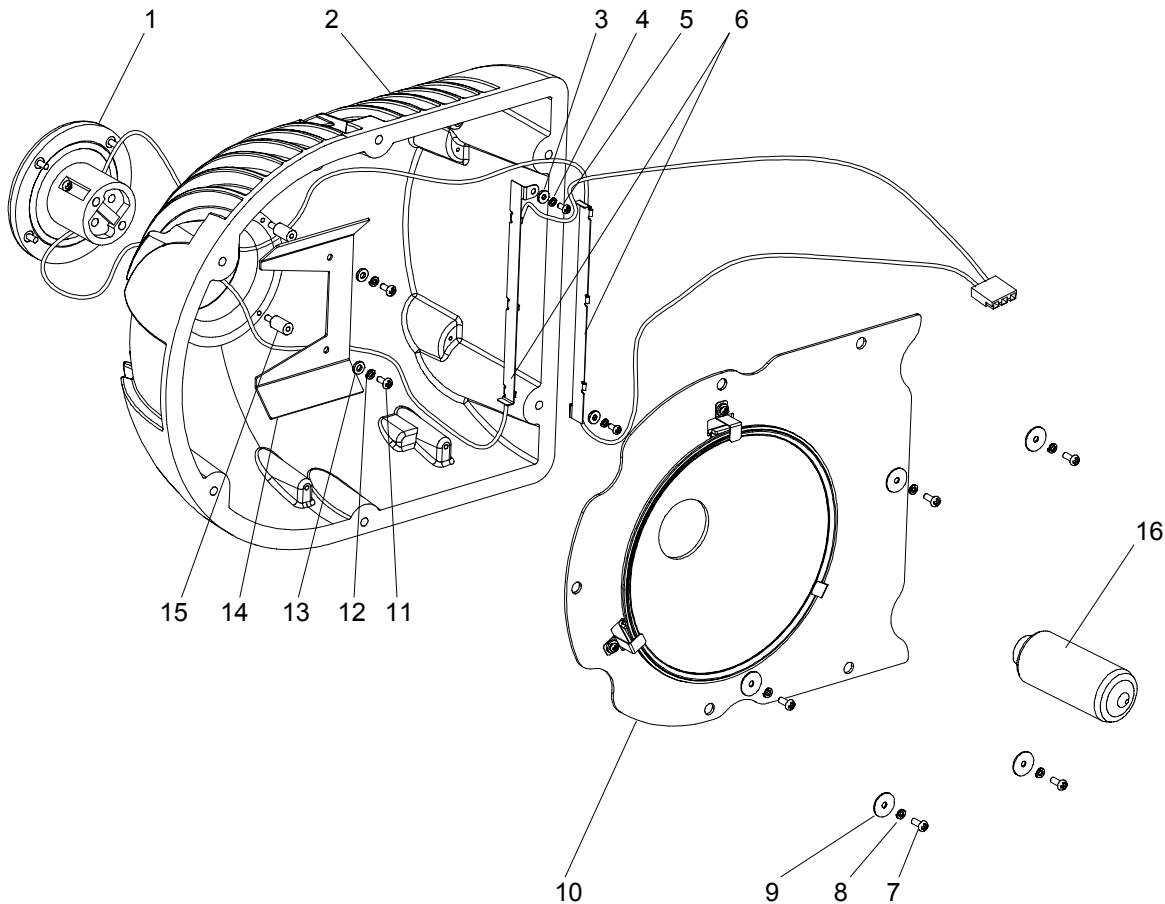
NO.	PART NO.	QTY	DESCRIPTION
1	J6506	1 EA	HEADER, PIN, LATCH EJECTION, R/A, 16POS
2	J6507	2 EA	LATCH W/O PUSH TABS FOR PIN HEADER ASSY
3	HW0020	2 EA	NUT, #2-56
4	J6488	4 EA	HEADER, MTA FRCT LOK STRT POST 4PIN
5	7091B4002	1 EA	PCB, YOKE TERMINATION, AR500
6	HW5249	2 EA	WASHER, NYLON, 0.098IDx0.312ODx0.032TH
7	HW0023	2 EA	WASHER, LOCK #2
8	HW0014	2 EA	SCREW, 2-56X1/2"PPZ



YTBPCB

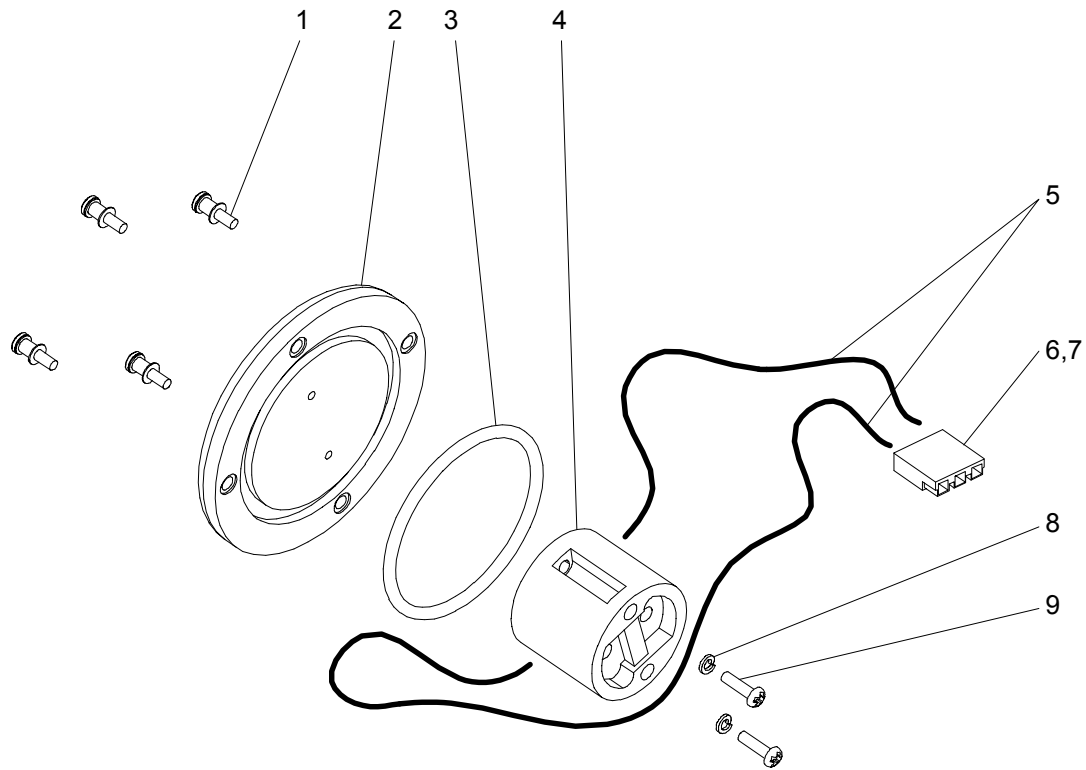
2.1.22 Rear Head Enclosure Assembly 7091A2007

NO.	PART NO.	QTY	DESCRIPTION
1	7091A2003	1 EA	AR500 BULB MOUNT/HEAD ENCL REAR CAP ASSY
2	7091A3033	1 EA	AR500 REAR HEAD ENCLOSURE, CASTING
3	HW2214	2 EA	WASHER, FLAT, #6 SS
4	HW2218	2 EA	WASHER, SPLIT LOCK, #6 SS
5	HW2185	2 EA	SCREW, #6-32X5/16"PPSS
6	7091A3068	2 EA	BULB WIRE FINGER SPRING
7	HW3126	5 EA	SCREW, #8-32X7/16"PPSS
8	HW3146	5 EA	WASHER, SPLIT LOCK, #8SS
9	HW3149	5 EA	WASHER, FLAT, #8SS, 3/4"OD
10	7091A2011	1 EA	REFLECTOR ASSEMBLY, AR500
11	HW3126	2 EA	SCREW, #8-32X7/16"PPSS
12	HW3146	2 EA	WASHER, SPLIT LOCK, #8SS
13	HW3149	2 EA	WASHER, FLAT, #8SS, 3/4"OD
14	7091A3067	1 EA	BULB WIRE DIVERTER
15	HW9215	2 EA	3/8OD, 8-32X.375, MALE TO FEMALE STNDOFF
16	RT144	1 EA	LAMP, MSD700W, AR500



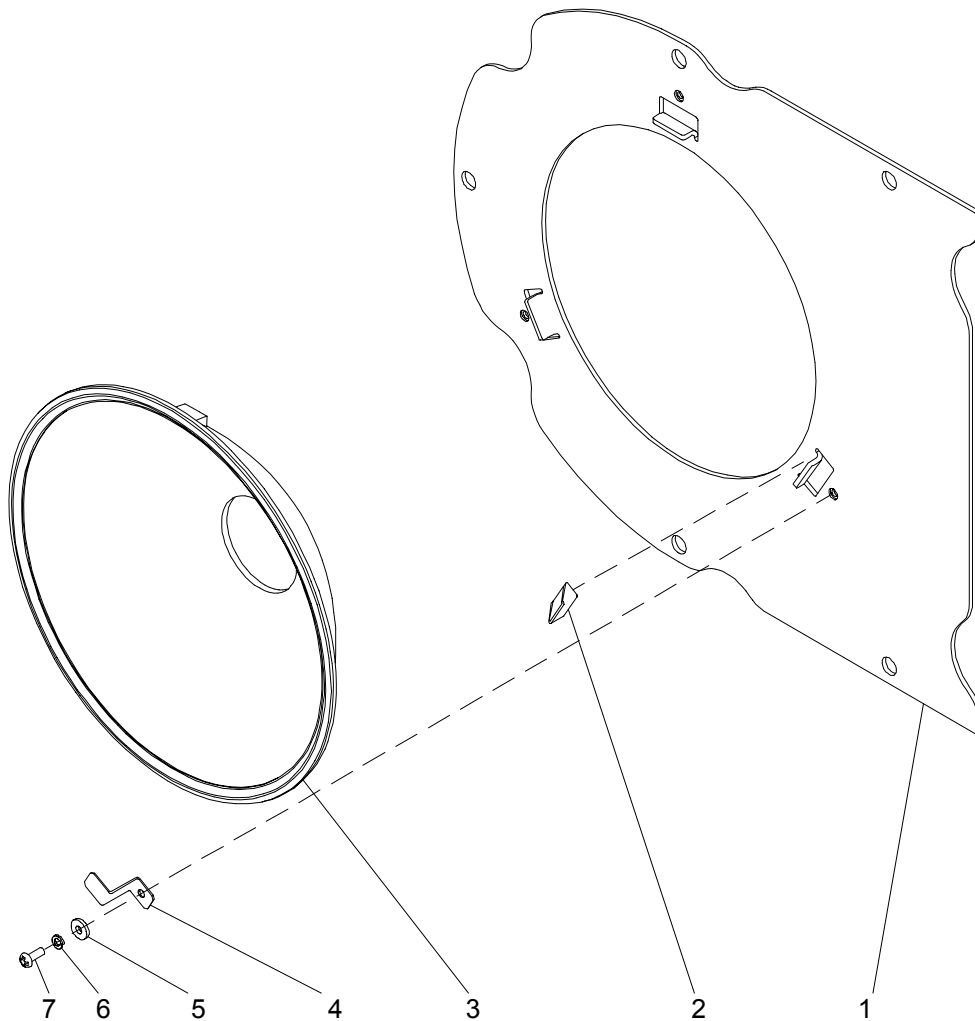
2.1.23 Bulb Mount/Head Enclosure Rear Cap Assy. 7091A2003

NO.	PART NO.	QTY	DESCRIPTION
1	HW3135	4 EA	SCREW, #8-32X0.660" CAPTIVE PHILLIPS
2	7091A3023	1 EA	HEAD ENCLOSURE REAR CAP, VERSION 2
3	HW6173	1 EA	O-RING, VITON, 3-1/4"OD X 2-7/8"ID
4	RT145	1 EA	SOCKET, LAMP, AR500
5	W443	68 IN	WIRE, 16AWG 25KVDC, 250°C, TEFLON
6	J768	1 EA	CONN HOUSING, 30 SERIES W/O FLNGS, 3 POS
7	J4217	2 EA	CRIMP CONTACT, S30 TIN
8	HW3146	2 EA	WASHER, SPLIT LOCK, #8SS
9	HW3128	2 EA	SCREW, #8-32X5/8"PPSS



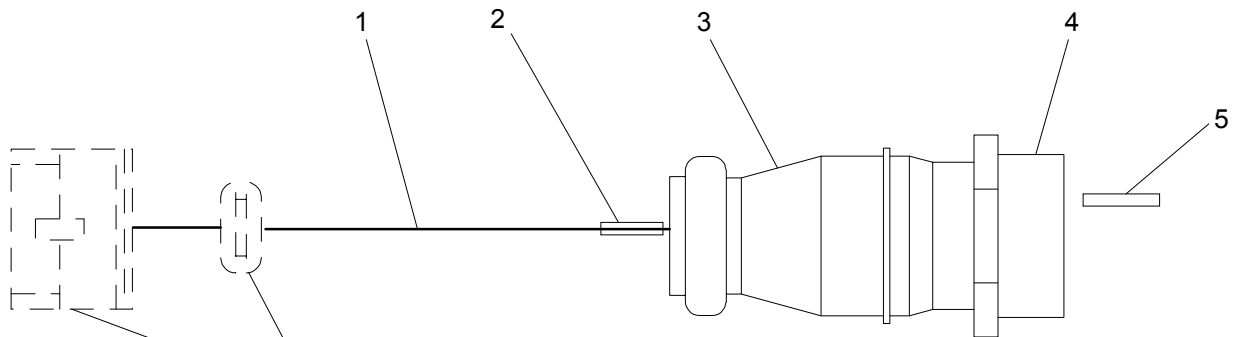
2.1.24 Reflector Assembly 7091A2011

NO.	PART NO.	QTY	DESCRIPTION
1	7091A3008	1 EA	REFLECTOR MOUNTING PLATE
2	7090A4014	3 EA	REFLECTOR MOUNTING PAD
3	OP3000	1 EA	REFLECTOR, PAR 64, CUSTOM COATED
4	7091A3007	3 EA	REFLECTOR RETAINING CLIP
5	HW2214	3 EA	WASHER, FLAT, #6SS
6	HW2218	3 EA	WASHER, SPLIT LOCK, #6SS
7	HW2186	3 EA	SCREW, #6-32X3/8"PPSS



2.1.25 Motor Drive Cable Assembly 7091B7004

NO.	PART NO.	QTY	DESCRIPTION
1	W6137	37 IN	CABLE, 22AWG, 16 COND, 200°C
2	W6130	3 IN	HEAT SHRINK, 3/8" BLACK
3	J773	1 EA	CLAMP, CABLE, SHELL SIZE 17
4	J774	1 EA	RECEPT, CPC 17-16, FREE HANGING
5	J6576	16 EA	CONTACT PIN, 22AWG GLD TYPE 3+



GROMMET(55-6706-0001) &
CONNECTOR(52-6224-0008)
ARE PART OF MIDDLE HEAD
ASSEMBLY (21-9642-0133).

WIRE ASSIGNMENTS	
COLOR CODE	POS
BLACK	1
WHITE	2
RED	3
GREEN	4
ORANGE	5
BLUE	6
WHITE/BLACK STRIPE	7
RED/BLACK STRIPE	8
GREEN/BLACK STRIPE	9
ORANGE/BLACK STRIPE	10
BLUE/BLACK STRIPE	11
BLACK/WHITE STRIPE	12
RED/WHITE STRIPE	13
GREEN/WHITE STRIPE	14
BLUE/WHITE STRIPE	15
BLACK/RED STRIPE	16

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Chapter 4 **Early Production Luminaire Service Procedures**

This chapter describes procedures required to repair prototype and pre-production **AR500** luminaire assemblies. The first 120 luminaires contain parts and assemblies that have been redesigned. The early assembly serial numbers are as follows:

Early production serial numbers:

AR500H-9310-0001 through AR500H-9406-0120.

Special procedures are required to repair the early production luminaires. These procedures are:

- 4.1 Replacing Head Gaskets,
- 4.2 Replacing a Lens Gasket,
- 4.2 Replacing a Motor Drive Cable.

4.1 Replacing Head Gaskets (on Early AR500 Luminaires)

After the initial design, the head assemblies were changed for improved water resistance. The new design incorporates six screws (instead of four) to secure the front or rear panels to the bulkhead. To replace a gasket on an early model AR500 luminaire you must use a new gasket and clear RTV to fill in two unused holes. The following parts, tools, and procedures are required to replace the head gaskets on early model AR500 luminaires.

4.1.1 Identification

The following illustration shows an early production style head assembly. Notice the front and rear covers are secured with four screws each instead of six screws each.

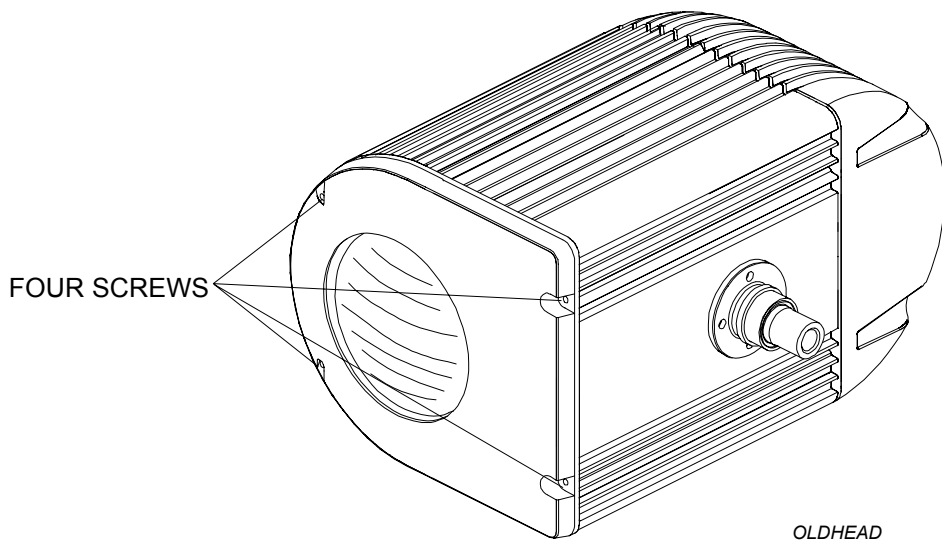


Figure 4.1 - Early Production Head Assembly

4.1.2 Parts

701A4088	1 EA.	HEAD MOLDED GASKET, AR500
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4.1.3 Tools

Screwdriver, Phillips #2

RTV, clear

4.1.4 Procedure

To replace head gaskets on early production luminaires:

1. Remove power from luminaire.
2. At head assembly, using screwdriver, remove eight screws and washers securing front lens assembly and rear lamp assembly to bulkhead. Remove assemblies.
3. Remove old gaskets.
4. Make sure surfaces for reapplication are clean and dry.
5. Place new gaskets, with tabs toward enclosure side, onto head assembly.
6. Using clear RTV, fill in two unused holes (two holes on each gasket). See Figure 4-2.
7. Install front and rear assemblies and secure with eight screws and washers each.

Note: When replacing rear head gasket, the lamp wire must be disconnected from lamp socket. Refer to section 6.2.5 in the “**AR500** Exterior Wash Luminaire Owners Manual”.

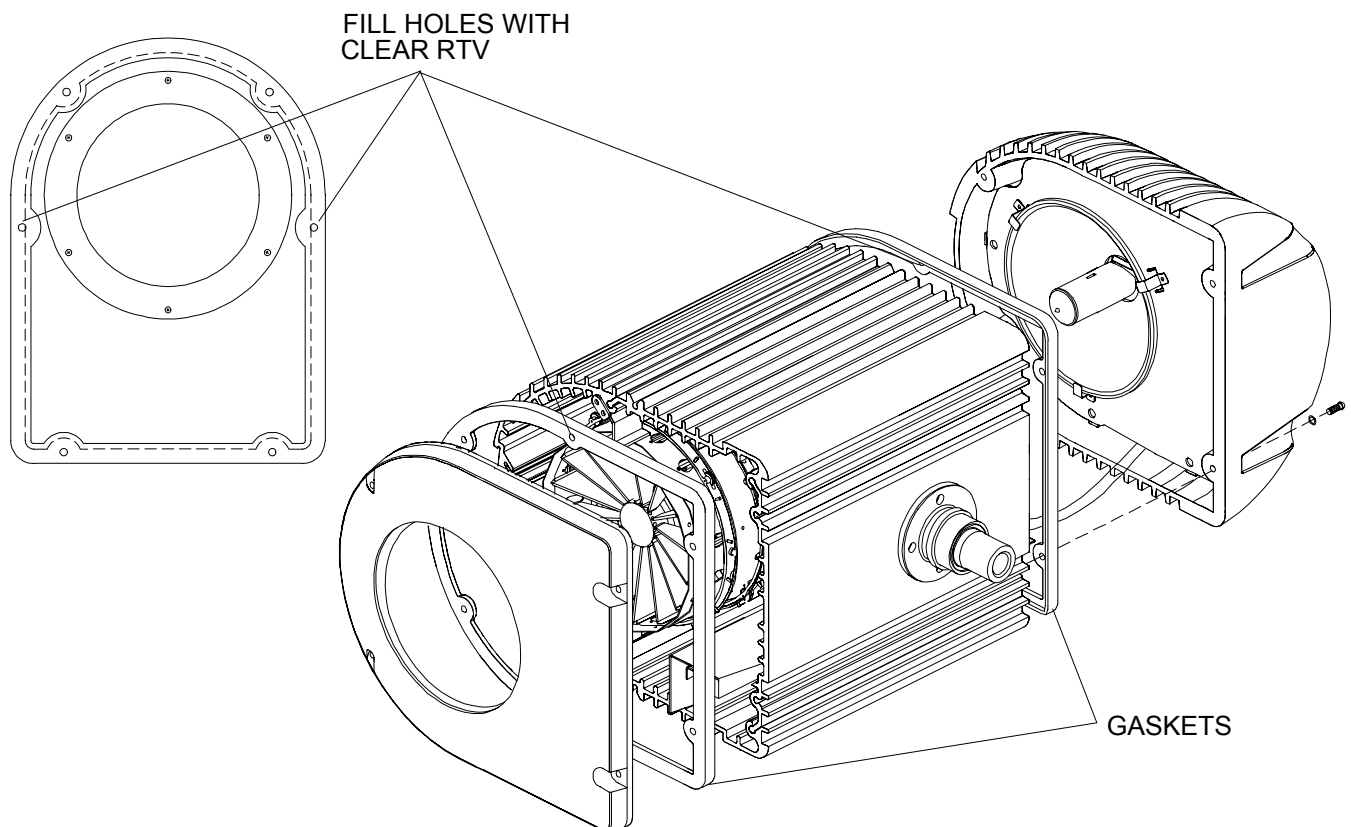


Figure 4.2 - Head Gasket Installation

4.2 Replacing Lens Gasket

On early production AR500 luminaires the lens gaskets are mounted on the inside of the front panel. To replace a lens gasket, the front panel must be removed. Use the following procedure to replace the lens gasket.

4.2.1 Identification

Notice the front panel is flat on early model AR500 luminaires. The lens is secured within the front panel.

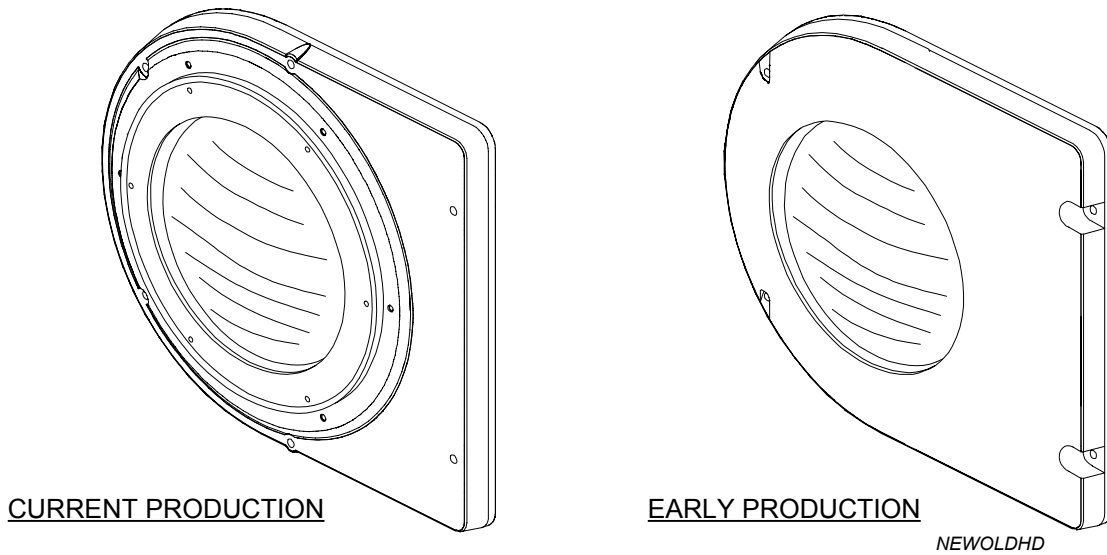


Figure 4.3 - Current & Early Production Front Panel Assemblies

4.2.2 Parts

7091A2037	1 EA.	LENS GASKET, AR500
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4.2.3 Tools

Screwdriver, #2 Phillips

4.2.4 Procedure

To replace a lens gasket on an early production luminaire:

1. At luminaire head front, using screwdriver, remove four screws and washers securing front panel to bulkhead. Remove front assembly.
2. At inside of front panel, use screwdriver to remove six screws and washers securing lens ring to front panel. Remove lens and lens ring.
3. Remove old gasket and clean lens with Windex® glass cleaner.
4. Install new lens gasket using steps one through three in reverse.

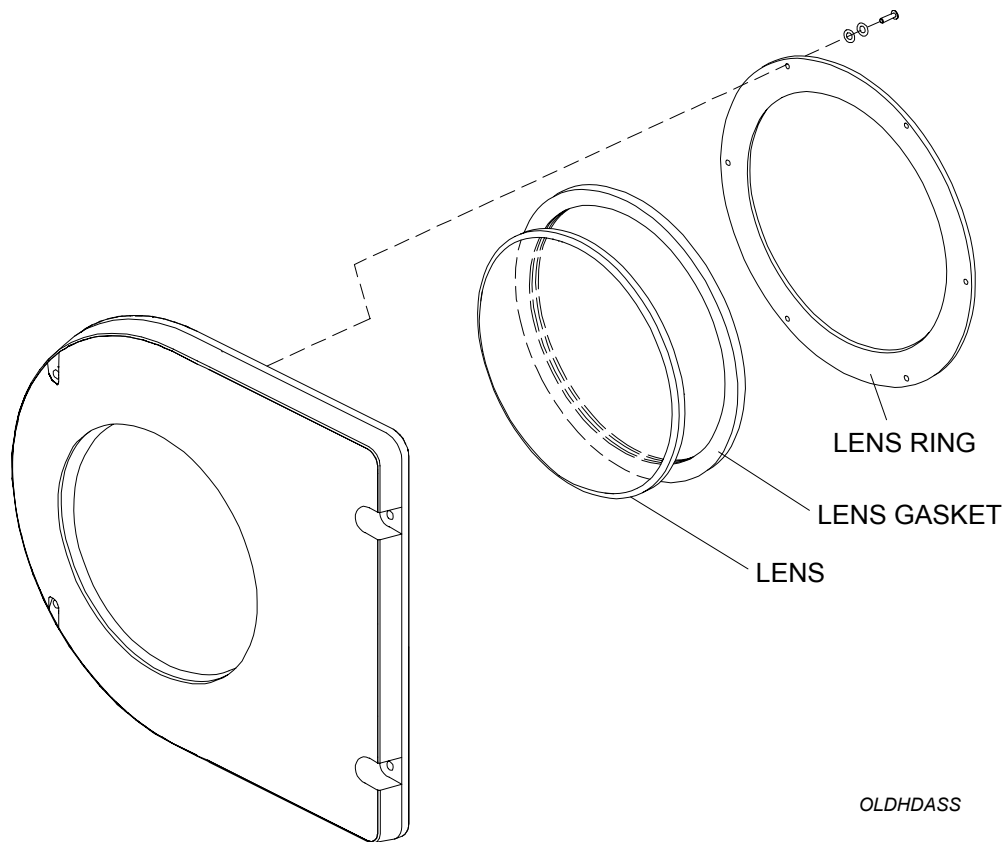


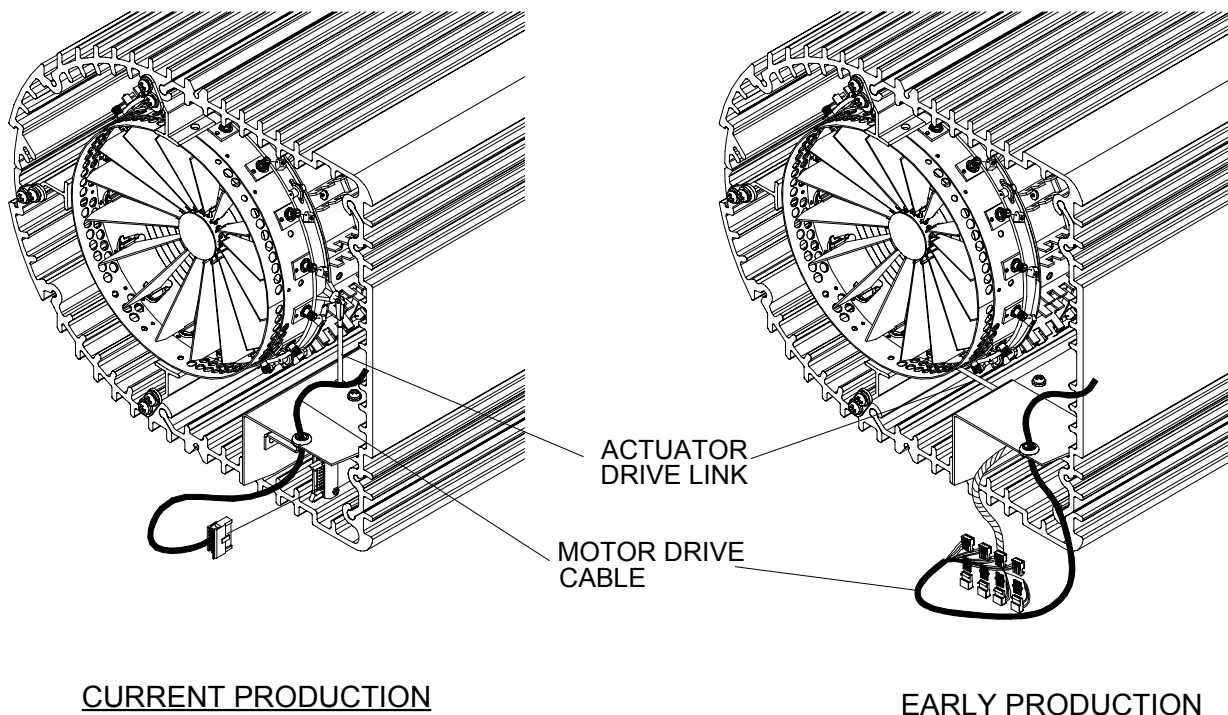
Figure 4.4 - Early Production Lens Gasket Replacement

4.3 Replacing Motor Drive Cable Assembly

The early production AR500 luminaires do not use a yoke termination board for the linear actuator motor connections into the remote head. If the motor drive cable must be replaced on an early production AR500 luminaire, a special cable with four 4-position MTA connectors must be installed. Also, four 4-position MTA extension headers must be used in conjunction between the connectors. To replace the motor drive cable standard version luminaires, the 16-position CPC connector housing must be removed from the old cable assembly and installed on the new cable assembly. The connector housing must be ordered separately if damaged.

4.3.1 Identification

Early production head units are easily identified by their front lens plates, refer to section 4.2 Replacing Lens Gasket. On early production luminaires the linear actuator assembly wire connections are different from current production units. On early production units, the actuator drive links are turned 90 degrees from current production units. This assembly was changed to allow easier access to the drive link connections. Also, a yoke termination PCB has been added. This PCB replaced the four 4-position MTA connectors and extension headers used on early production units. The following figures show an early production head and a current production head. Notice the difference between the actuator assemblies.



CURRENT PRODUCTION

EARLY PRODUCTION

Figure 4.5 - Current and Early Production Linear Actuator Assemblies

4.3.2 Parts

Standard Version

7091B7014 1 EA. CABLE ASSEMBLY, MOTOR DRIVE, PRE-PRODUCTION, STD. VERS.

Optional CPC connector parts

J773 1 EA. CLAMP, CABLE, SHELL SIZE 17

J774 1 EA. RECEPT, CPC 17-16, FREE HANGING

Remote Version

7091B7015 1 EA. CABLE ASSEMBLY, MOTOR DRIVE, PRE-PRODUCTION, RMT VERS.

4.3.3 Tools

Screwdriver, #2 Phillips

Screwdriver, #2 flat

Screwdriver, #1 flat

Depinning tool

4.3.4 Procedures

To install new motor drive cable on an early version **AR500** luminaires:

Standard Version

1. Remove power from luminaire.
2. Using #2 Phillips screwdriver, loosen four screws and remove stanchion cap.
3. At electronics plate, disconnect two connectors and remove electronics plate.
4. At ballast plate, disconnect two connectors and remove ballast plate.
5. Using pin extractor tool, unpin 16-pin CPC connector at exposed end of motor drive cable. If 16-pin CPC connector is damaged install new connector (see Optional CPC connector parts).
6. Using #2 Phillips screwdriver, loosen four outer screws and remove head enclosure front cover ([Figure 4.1](#)).
7. Disconnect four motor drive cable 4-pos connectors from linear actuators.
8. Using #2 Phillips screwdriver, remove screw securing cable clamp to motor assembly plate and remove cable clamp.
9. Pull lamp wires through tilt tube.

10. Pull motor cable through tilt tube and out through front of head enclosure.
11. Feed new motor drive cable (7091B7014) from inside head through tilt tube, and repin CPC inside stanchion (refer to pin assignment in [Table 4.1](#)).
12. At linear actuator motor cables, using four male/male headers, connect four 4-position MTA connectors. Make sure pin 1 of new motor cable matches pin 1 of linear actuator cable. See [Figure 4.6 - MTA Extension Header Installation](#).
13. Install ballast and electronics plates and connector appropriate connectors.
14. Replace stanchion cap.
15. Replace head enclosure front cover.

PIN 1	=	BLK
PIN 2	=	WHT
PIN 3	=	RED
PIN 4	=	GRN
PIN 5	=	ORN
PIN 6	=	BLU
PIN 7	=	WHT/BLK STRIPE
PIN 8	=	RED/BLK STRIPE
PIN 9	=	GRN/BLK STRIPE
PIN 10	=	ORN/BLK STRIPE
PIN 11	=	BLU/BLK STRIPE
PIN 12	=	BLK/WHT STRIPE
PIN 13	=	RED/WHT STRIPE
PIN 14	=	GRN/WHT STRIPE
PIN 15	=	BLU/WHT STRIPE
PIN 16	=	BLK/RED STRIPE

Table 4.1 - 16-Pin Connector Color Code

Remote Version

Note: Refer to [8.2.2 Alternate Wiring For Remote Ballast Version](#).

1. Remove power from luminaire.
2. Using #2 flat screwdriver, remove large cover and small cover from remote mounting assembly, gradually loosening screws in a cross-diagonal pattern to avoid damage to captive screws.
3. Disconnect motor drive cable from 16-position termination block.
4. Using #2 Phillips screwdriver, loosen four outer screws and remove head enclosure front cover.
5. Disconnect four MTA connectors from linear actuators.
6. Remove screw attaching cable/cable clamp to head enclosure.

7. Pull cable through tilt tube and out through front of head enclosure.
8. Feed new motor drive cable (7091B7014) through tilt tube and remote mounting assembly. Connect to termination block in remote mounting assembly. Refer to Table 4.1 - 16-Pin Connector Color Code and see Figure 4.7 - Motor Cable Wire Codes.
9. At linear actuator motor cables, using four MTA extension headers, connect four 4-position MTA connectors. Make sure pin 1 of new motor cable matches pin 1 of linear actuator cable. See Figure 4.6 - MTA Extension Header Installation.
10. Replace head enclosure front cover. Replace covers for remote mount.

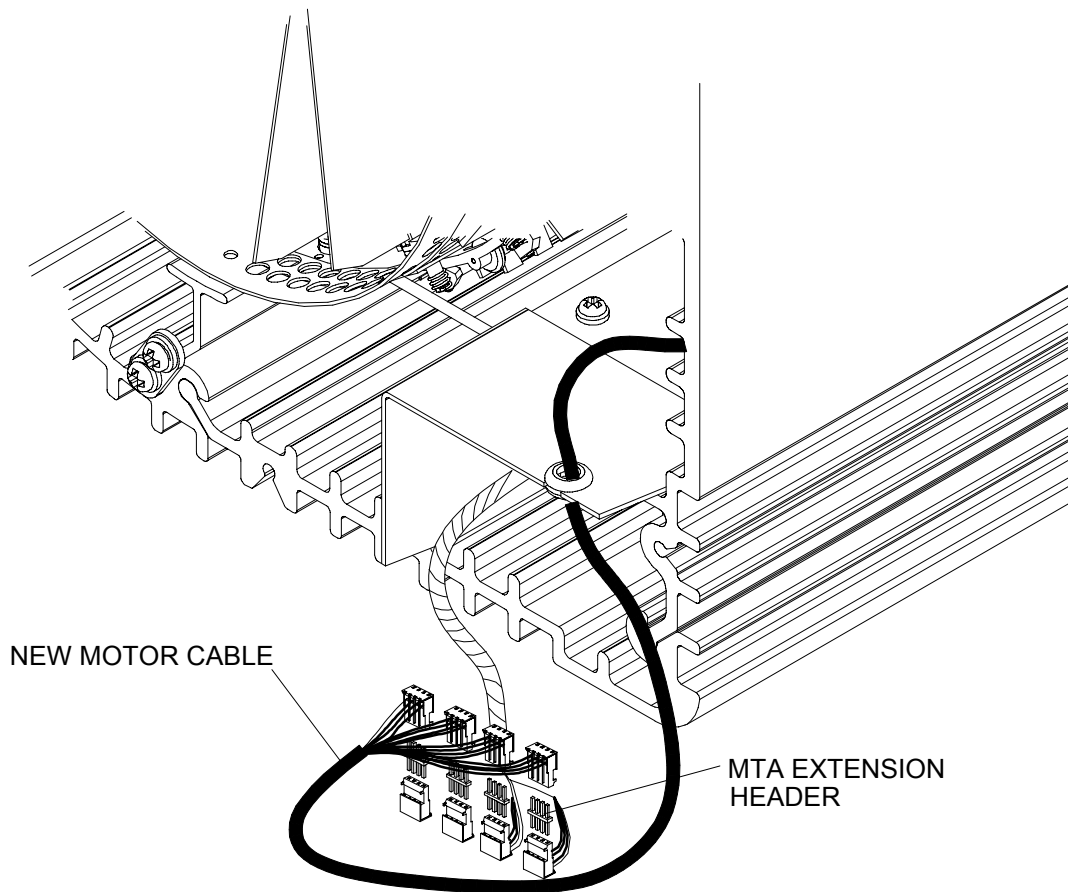


Figure 4.6 - MTA Extension Header Installation

4-10 IRIDEON -AR500 EXTERIOR WASH LUMINAIRE ILLUSTRATED PARTS BREAKDOWN

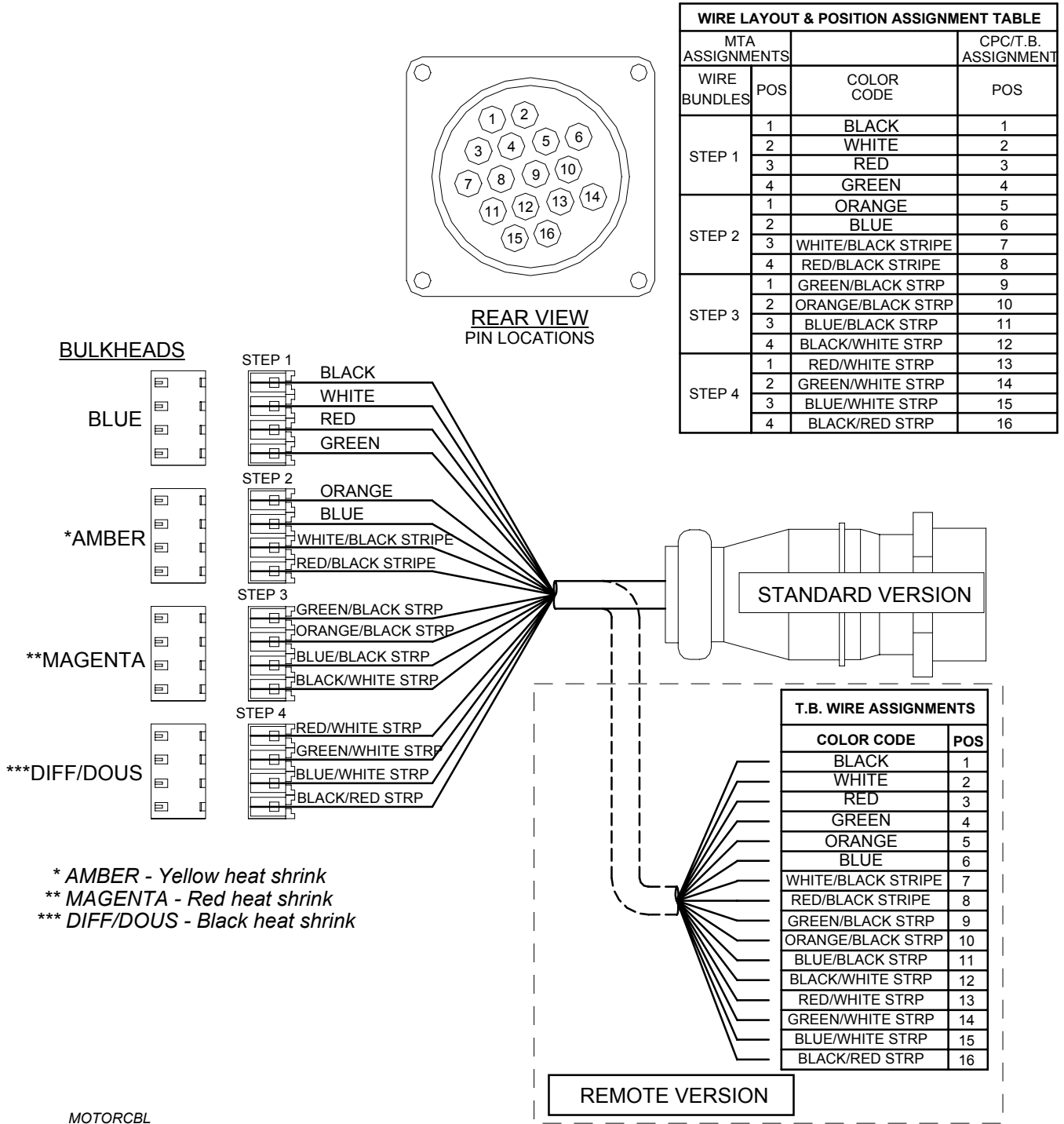


Figure 4.7 - Motor Cable Wire Codes