



## PARTS CATALOG



2017-18 MORGAN OLSON BODY  
2017-18 FORD CHASSIS F-59

22'x85"Hx93"W F59 US GAS  
UNIT & VIN NUMBERS  
SEE PAGE 4



PUBLISHED MAR 2018  
1.800.233.4823  
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This parts guide contains illustrations and part numbers for aramark Delivery Vehicle Package Cars and applies to bill of material # JV001825 produced in 2017 - 2018.

Cover photo shown with optional lift gate installed. See page 36 for Lift Gate information.

This book has been divided into chapters. Each chapter has illustrations with part numbers and descriptions. When possible, each part is pointed out to help identify it. Orientation references are from the rear of the vehicle facing forward. LH (LEFT HAND) is roadside and RH (RIGHT HAND) is curbside.

### **Procedure to Order Parts**

1. Depending on the part desired, turn to the appropriate section.
2. Locate the desired part on the Illustration Page(s) and note it's part number.
3. Contact a Morgan Olson Service Parts Representative. Have part numbers readily available.
4. When placing orders, specify vehicle VIN number.

FOR WARRANTY INFORMATION CALL 1-800-262-3437

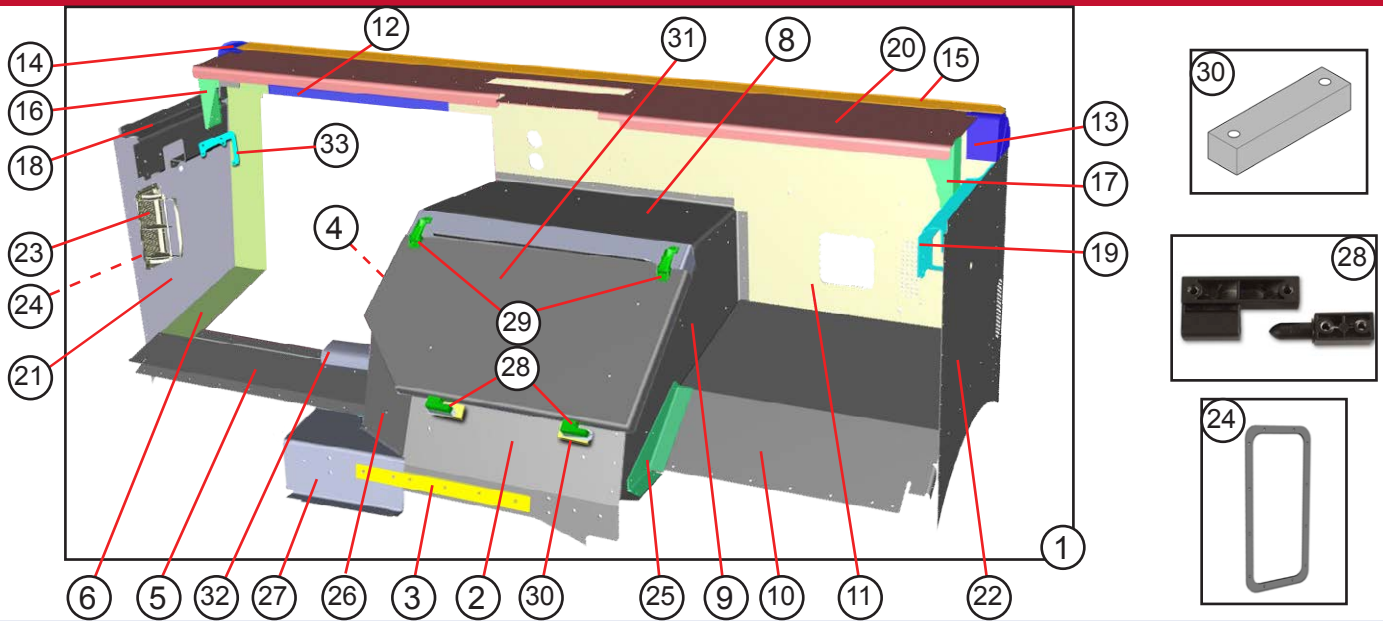
ANY QUESTIONS OR CONCERNS SHOULD BE DIRECTED TO YOUR SERVICE  
PARTS REPRESENTATIVE AT  
1-800-233-4823

At Morgan Olson, our quest for quality and safety is ongoing and therefore the specifications on the product described herein may vary over time. Please contact Morgan Olson for the latest product information and available safety features and options.

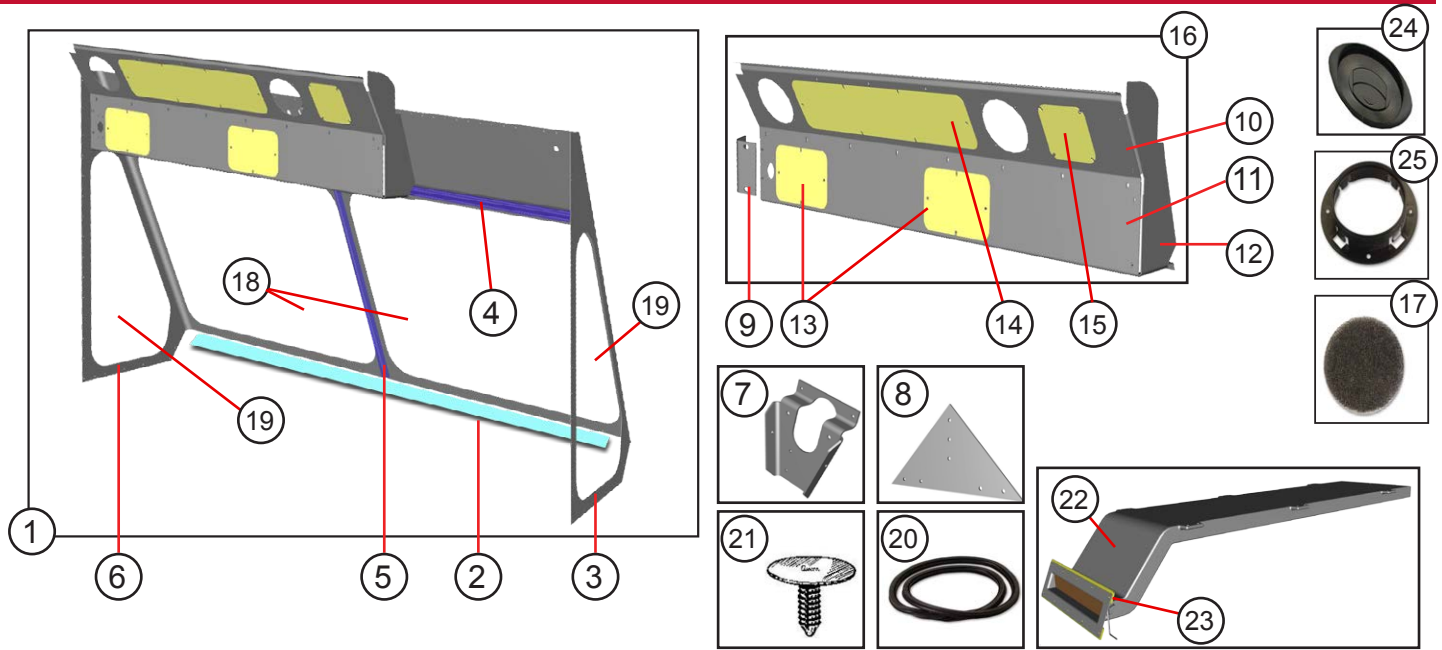
THIS PARTS CATALOG APPLIES TO THE FOLLOWING ARAMARK UNIT NUMBERS.

Chassis Vin#	Unit#	Chassis Vin#	Unit#
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1F66F5KYXJ0A08765	0028086S	1F66F5KY4J0A08227	0028062S
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1F66F5KY3J0A08767	0028088S	1F66F5KY8J0A08229	0028064S
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1F66F5KY3J0A08770	0028091S	1F66F5KY8J0A08232	0028067S
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1F66F5KY4J0A09202	0028172S	1F66F5KY9J0A11026	0028213S
1F66F5KY6J0A09203	0028173S	1F66F5KY3J0A12480	0028111S
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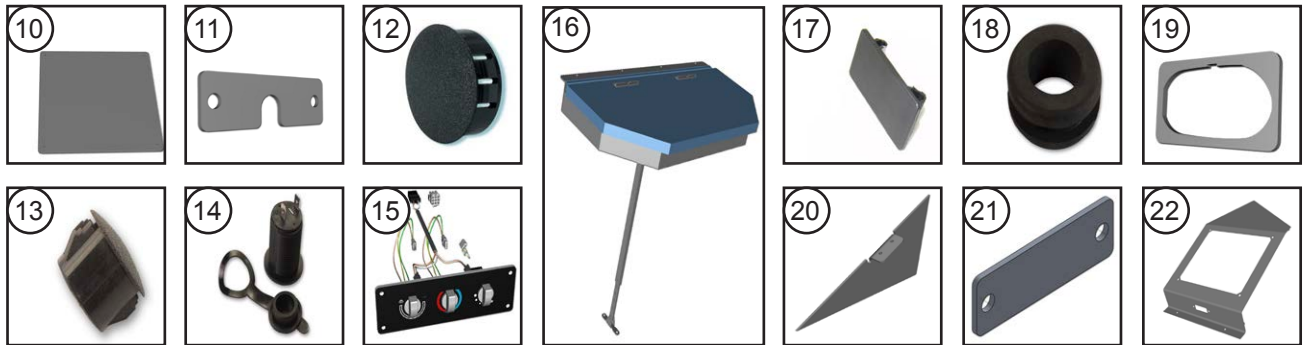
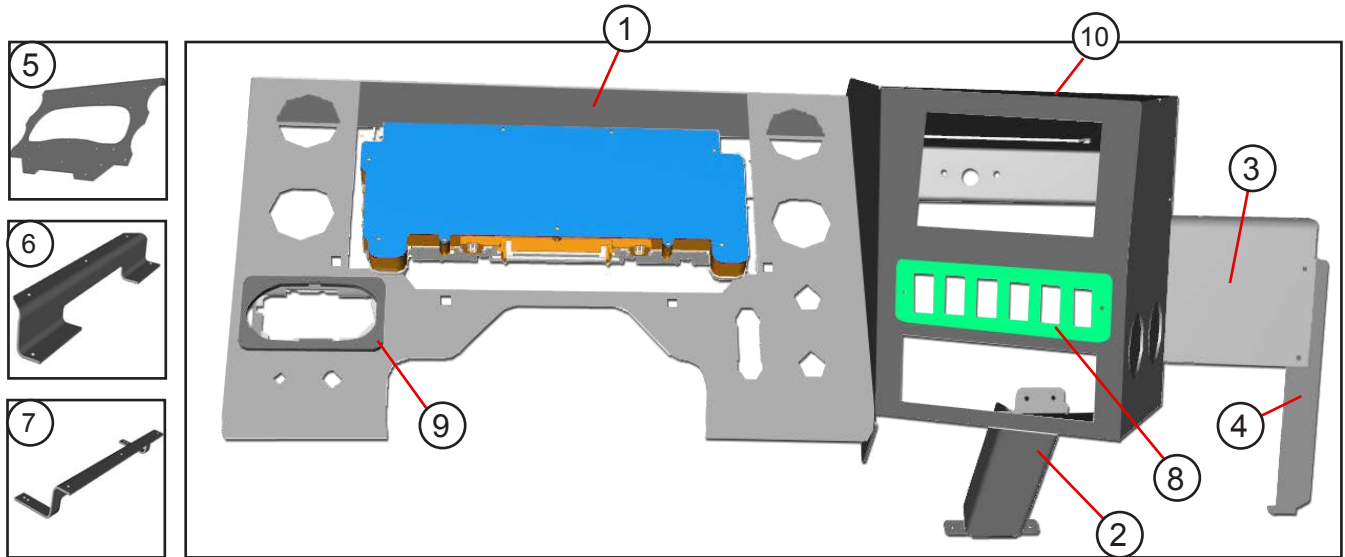




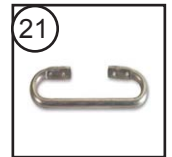
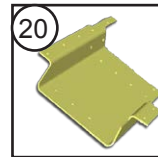
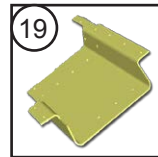
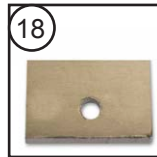
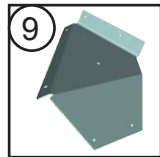
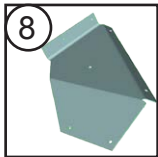
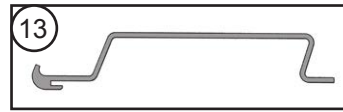
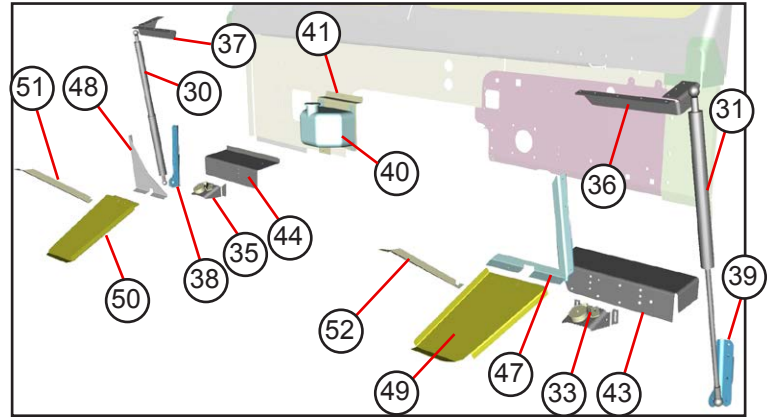
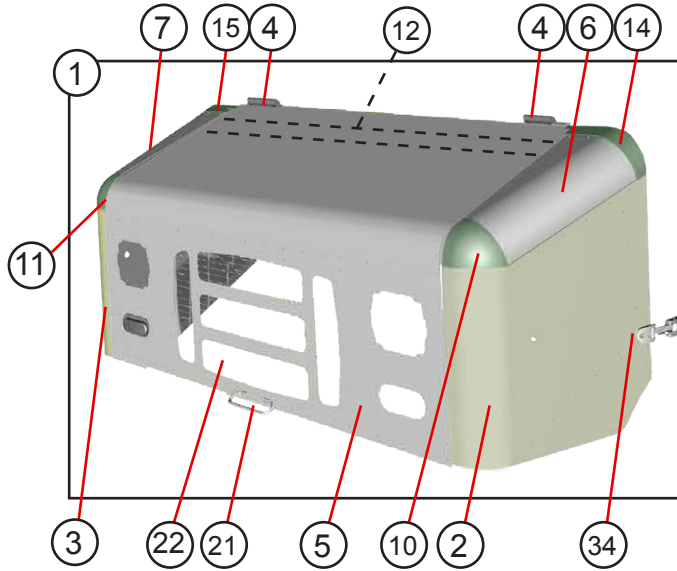
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	115005224	CAB ASSEMBLY	1	EA
2	115005404	PLATE ENGINE BOX SADDLE AL.125X15.74X24.07	1	EA
3	077050402	SHIM AL .25X1.62X20.8	1	EA
4	115005403	ENGINE BOX SIDE ROADSIDE AL.102X19.26X27.88	1	EA
5	115005405	TOE BOARD ROADSIDE AL.125X6.76X34.53	1	EA
6	115005406	ADAPTER TOE BOARD AL.102X7.24X45.63	1	EA
8	115005402	ENGINE BOX TOP AL.125X15.88X33.04	1	EA
9	098005501	ENGINE BOX HOUSING AL.102X20.85X32.55	1	EA
10	115005415	TOE BOARD CURBSIDE AL.102X28.09X29.44	1	EA
11	115005400	DASH WALL CURBSIDE AL.125X25.89X60.38	1	EA
12	115005401	DASH WALL ROADSIDE AL.125X8.46X30.45	1	EA
13	8502000	CORNER CASTING CURBSIDE	1	EA
14	8502001	CORNER CASTING ROADSIDE	1	EA
15	083023402	WINDSHIELD RAIL AL 851100X89	1	EA
16	083005418	SUPPORT RAIL ROADSIDE AL.102X5.74X8.27	1	EA
17	083005419	SUPPORT RAIL CURBSIDE AL.102X5.74X8.27	1	EA
18	077050400	STIFFENER ROADSIDE AL.125X10.93X17.81	1	EA
19	077050401	STIFFENER CURBSIDE AL.125X10.93X17.81	1	EA
20	093005512	DASH SHELF AL.125X13.74X89	1	EA
21	115005417	CAB SKIRT ROADSIDE AL.07X27.29X30.57	1	EA
22	093005440	CAB SKIRT CURBSIDE AL.07X27.28X30.57	1	EA
23	47008545	VENT 2 WAY HINGE-LESS	1	EA
24	47008548	GASKET VENT	1	EA
25	115005416	GUSSET TOE BOARD CURBSIDE AL.125X7.84X14.44	1	EA
26	115005409	FILLER SADDLE LOWER RS AL.125X11.66X14.49	1	EA
27	115005408	SADDLE FILLER AL.125X9.6X13.06	1	EA
28	47007859	HINGE OFFSET	2	EA
29	47000932	LATCH ADJUSTABLE DRAW ZIP STEEL	2	EA
30	117028400	SHIM ENGINE BOX	2	EA
31	145028400	PANEL ENGINE BOX LID AL.102X20.3X33.06	1	EA
32	115005420	CASTING TRANSITION F59	1	EA
33	115084402	BRACKET FUSE BOX AL.102X6.4X8.66	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1		WINDSHIELD ASSEMBLY 85H93W WITH CARGO VENT		
2	083023402	WINDSHIELD RAIL (SEE PAGE 4 ITEM 15)	1	EA
3	088055433	FRAME WINDSHIELD CURBSIDE AL .102X53.45X70.25	1	EA
4	077055404	STIFFENER W/S AL 450540X44.25	2	EA
5	077055401	POST W/S CENTER AL 450540X44.84	1	EA
6	088055405	FRAME WINDSHIELD ROADSIDE AL .102X53.45X69.95	1	EA
7	077055402	GUSSET FRAME AL .125X6.49X7.27	1	EA
8	998555329	GUSSET FRAME AL .125X4.6X9.19	1	EA
9	088076449	BRACKET, MOUNTING AL.102X2.36X3.9	1	EA
10	097076488	COVER WIPER MOTOR UPPER AL.102X15.06X59.84	1	EA
11	120076400	COVER WIPER MOTOR LOWER AL.102X17.54X59.84	1	EA
12	097076461	COVER WIPER CURBSIDE AL.102X13.65X20.53	1	EA
13	097076436	PLATE COVER AL.070X6X10	2	EA
14	097076435	PLATE COVER	1	EA
15	097076437	PLATE COVER	1	EA
16		COVER WIPER MOTOR		
17	48000504	FILTER FM	2	EA
18	96756400	GLASS WINDSHIELD	2	EA
19	006756400	GLASS SIDE TRIANGLE	2	EA
20	44004303	WEATHER STRIPPING LS-1660 X147.5	2	EA
20	44004309	WEATHER STRIPPING LS-1660 X86.25	2	EA
NS	1109001	INSULATION FIBERGLASS	7.25	FT
NS	100011400	POLYESTER FILL ROOF LINER 4X22.5	3	EA
21	47006610	CLIPS PUSH IN .45HEADX.64	52	EA
22	47008802	DUCT VENT INTERIOR CAB/CARGO	1	EA
23	94010316	REINFORCEMENT VENT	2	EA
24	47008547	LOUVER ROUND	2	EA
25	47008546	PANEL MOUNT LOUVER	2	EA

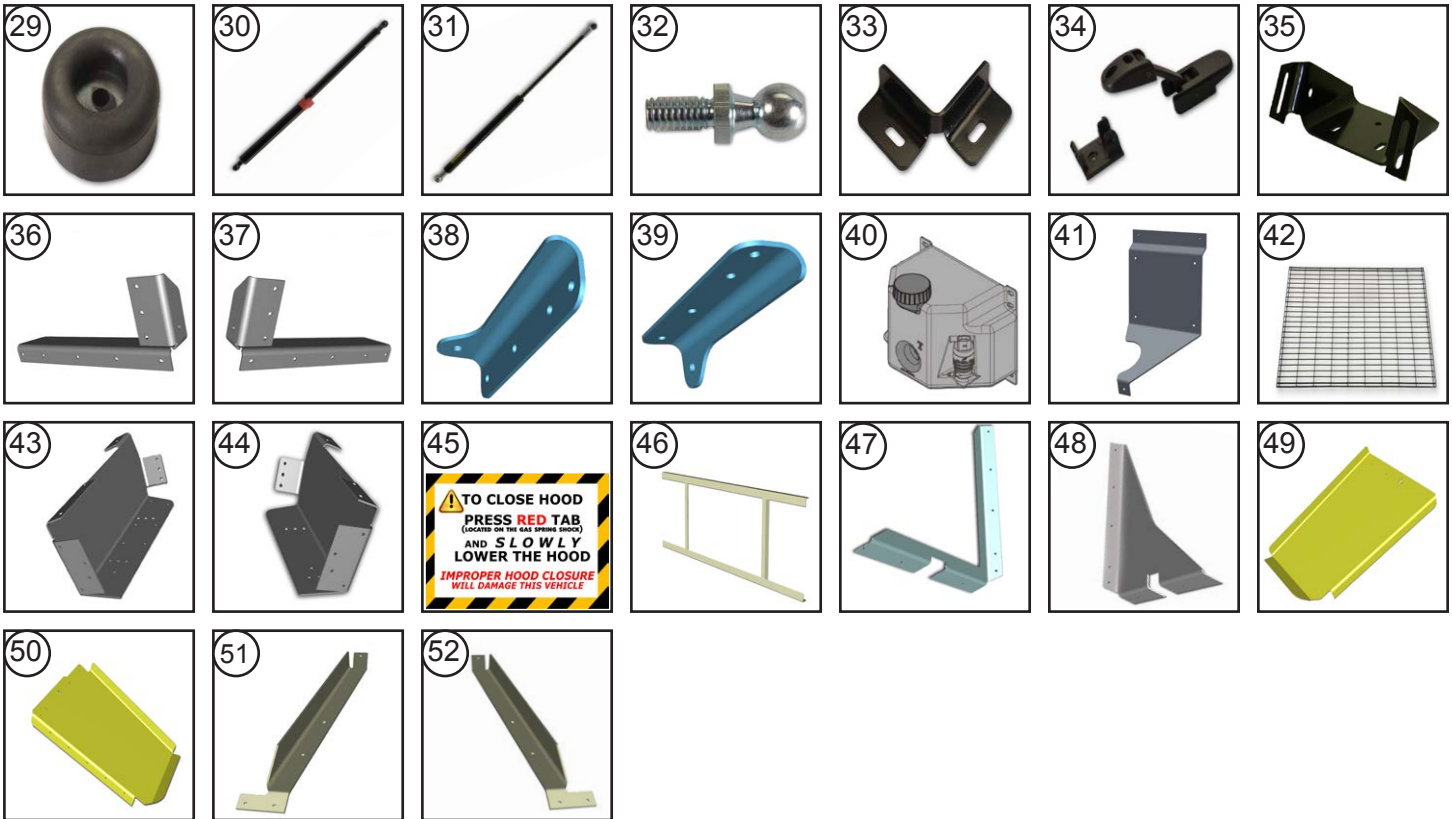


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	135027206	I/P WELDMENT F59 W/DOUBLE DIN RADIO	1	EA
2	125027413	BRACKET REINFORCEMENT I/P AL.102X4.32X11.31	1	EA
3	125027416	BRACKET MOUNTING AL.102X7.71X10.08	1	EA
4	122027401	BRACE AL.102X1.9X12.62	1	EA
5	115027414	PLATE FACE IP AL.102X11.99X18.39	1	EA
6	115027401	IP CLUSTER MOUNT AL.102X3.36X14.5	1	EA
7	115027402	IP CLUSTER MOUNT AL.102X4.86X16.14	1	EA
8	118027417	PLATE ROCKER SWITCH	1	EA
9	115027406	BRACKET LOCK AL.125X2.78X4.95	1	EA
10	128027421	PLATE ACC COVER RADIO AL.102X9X11	1	EA
11	135093401	PLATE COVER I/P BACK AL.102X1X3	1	EA
12	1111513	PLUG HL BLACK	1	EA
13	1111520	PLUG HL BLACK	1	EA
14	46026378	RECEPTICLE 12V POWER W/TETHER SS BODY	1	EA
15	555001413	PANEL CONTROL HEATER (SEE PAGE 27)	1	EA
16	47009283	SHELF WORK STATION ASSEMBLY W/DIVIDER & LOCK	1	EA
17	46023506	PLUG ROCKER SWITCH BLACK	3	EA
18	46004416	GROMMET 1ID .25 MATERIAL THICKNESS	2	EA
19	115027407	BRACKET SPACER STL.25X3.14X5.45	1	EA
20	118027415	GUSSET AL .125X5.72X11.26	1	EA
21	155027400	COVER TOP I/P BLACK AL .102X1X3	1	EA
22	135027400	COVER TOP I/P AL .102X12.78X20.47	1	EA



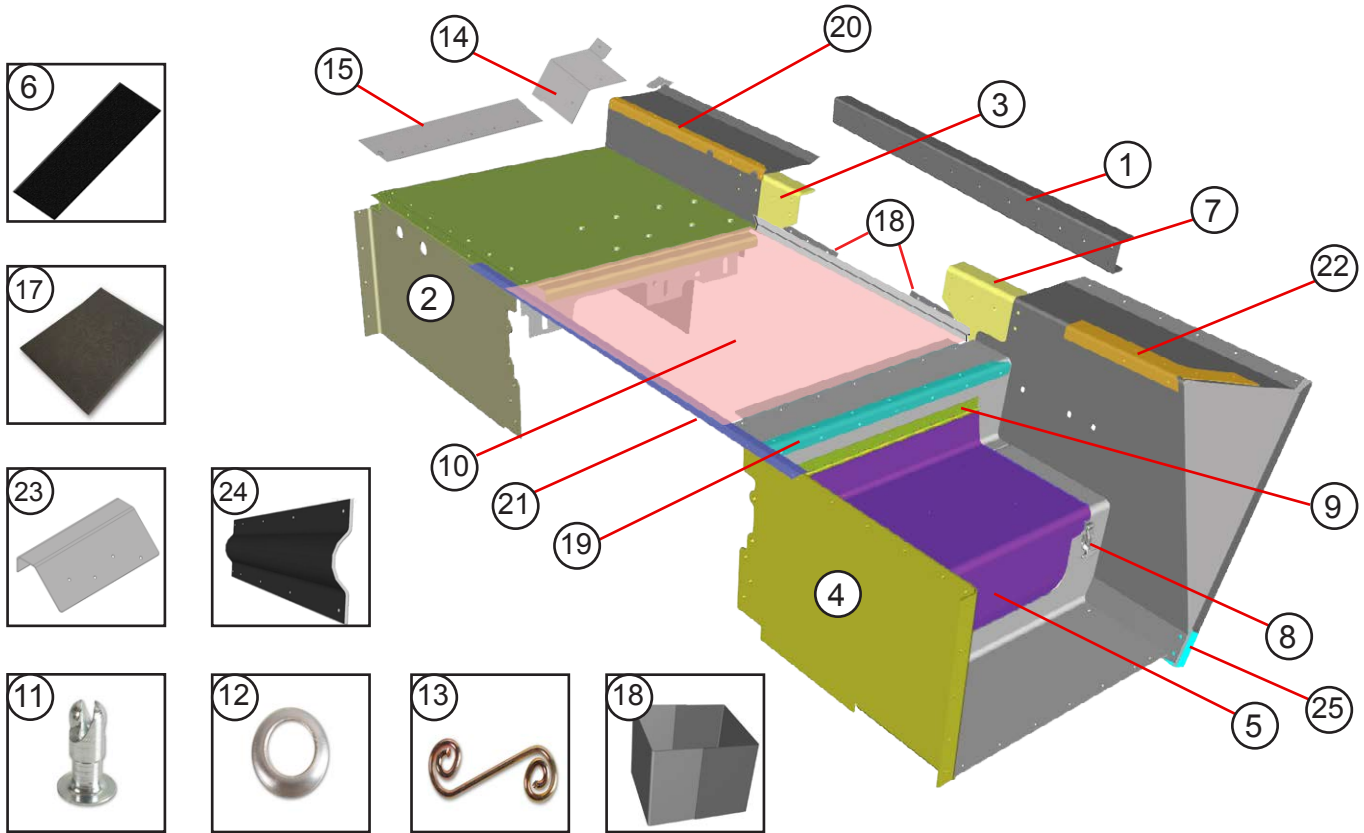
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1	115017200	HOOD ASSEMBLY	1	EA
2	088017414	HOOD SKIRT AL .07X30.78X33.11 ROADSIDE	1	EA
3	088017415	HOOD SKIRT AL .07X30.78X33.11 CURBSIDE	1	EA
4	47007852	HINGE ASSEMBLY	2	EA
5	115017400	PANEL HOOD FCC AL.07X53.36X72	1	EA
6	088017416	COWL HOOD ROADSIDE AL .07X15.91X22.28	1	EA
7	088017417	COWL HOOD CURBSIDE AL .07X15.91X22.28	1	EA
8	95817312	GUSSET CORNER ROADSIDE AL .07X13.52X14.72	1	EA
9	95817313	GUSSET CORNER CURBSIDE AL .07X13.52X14.72	1	EA
10	45100057	CORNER CAST KNEE COWL FRONT ROADSIDE	1	EA
11	45100058	CORNER CAST KNEE COWL FRONT CURBSIDE	1	EA
12	088017420	STIFFENER HOOD AL 450015X68.62	1	EA
13	45001500	BRACKET HOOD AL HD X69.77	1	EA
14	45100060	CAP COWL END ROADSIDE	1	EA
15	45100061	CAP COWL END CURBSIDE	1	EA
17	91617304	PLATE TAP	2	EA
18	96717312	SHIM HOOD AL .125X.62X1.88	2	EA
19	115017403	STIFFENER HOOD ROADSIDE	1	EA
20	115017404	STIFFENER HOOD CURBSIDE	1	EA
21	90187300	GRAB HANDLE	1	EA
22	45700101	GRILLE WIRE MESH 20.5X38.81	1	EA
NS	44004077	SEAL TAPE #1458BTXFT	4.42	FT



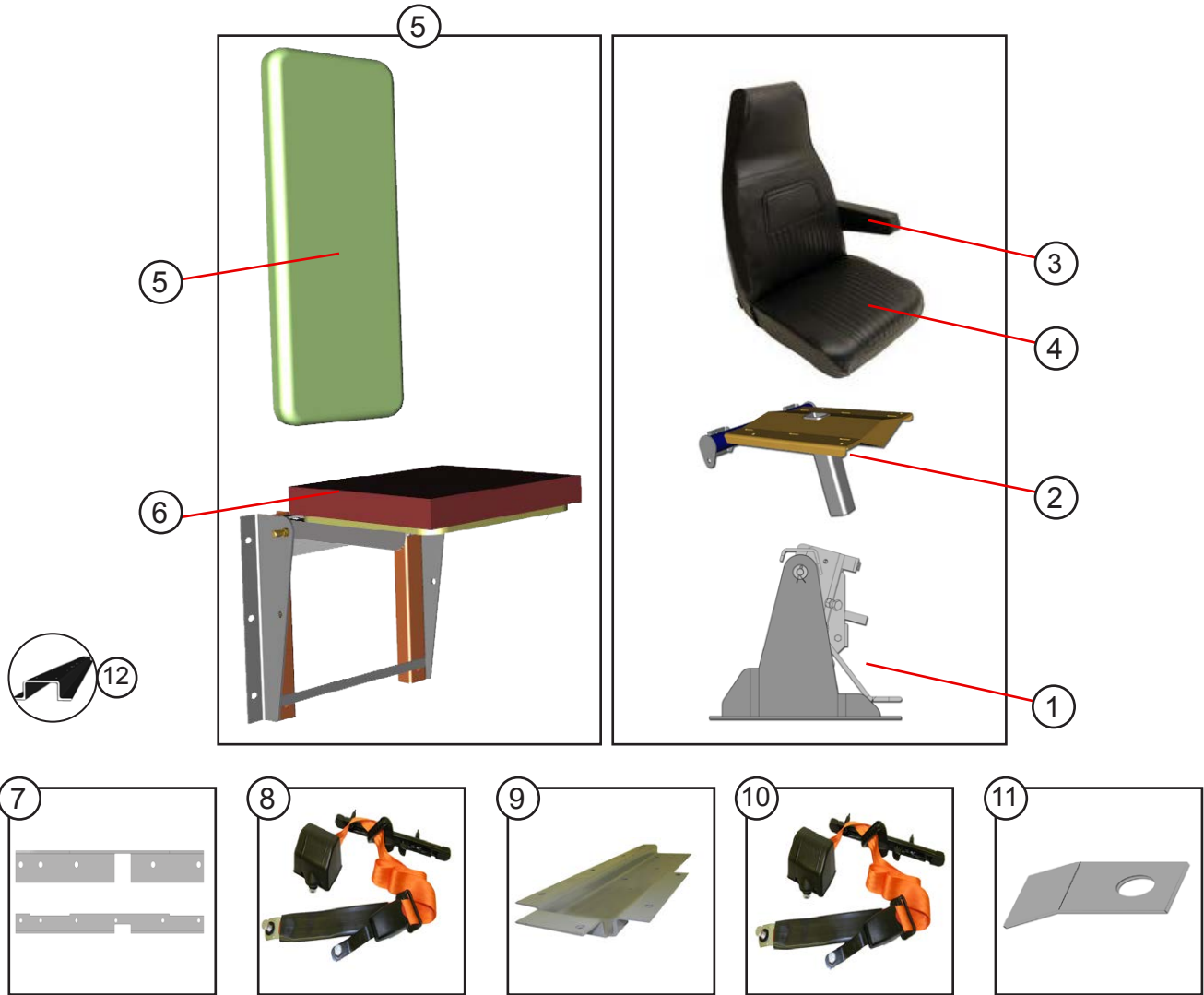


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
29	44002004	BUMPER RUBBER HOOD REST	2	EA
30	47006116	GAS SPRING WITH LOCK 140LB 20/12 IGS	1	EA
31	47006117	GAS SPRING WITH OUT LOCK 140LB 20/12 IGS	1	EA
32	40900019	STUD BALL SUSPENSION	4	EA
33	96713300	ANGLE STEEL STOP HOOD REST	2	EA
34	47000613	HOOD LATCH	2	EA
35	077150400	BRACKET SUPPORT HOOD REST	2	EA
36	124016401	BRACKET GAS SPRING AL.125X3.6X16.48 ROADSIDE	1	EA
37	124016402	BRACKET GAS SPRING AL.125X3.6X16.48 CURBSIDE	1	EA
38	124016403	BRACKET HOOD LOWER AL.188X2.85X6.4 CURBSIDE	1	EA
39	124016404	BRACKET HOOD LOWER AL.188X2.85X6.4 ROADSIDE	1	EA
40	47004505	WASHER BOTTLE WITH PUMP	1	EA
41	165063401	BRACKET WASHER BOTTLE AL .102X9.59X19.69	1	EA
42	45700101	MESH GRILL	1	EA
43	115026400	SPLASH PAN ROADSIDE	1	EA
44	077260404	SPLASH PAN CURBSIDE	1	EA
45	43000903	HOOD PROPER INSTRUCTIONS LABEL	1	EA
46	088017255	SUPPORT ASSEMBLY GRILL	1	EA
47	088017431	SUPPORT SPLASH PAN AL .102X13.07X16.83	1	EA
48	088017436	SUPPORT SPLASH PAN AL .102X16.07X16.83	1	EA
49	088017425	SPLASH PAN AL .102X19.43X26.95 ROADSIDE	1	EA
50	115017401	SPLASH PAN AL .102X19.93X26.95 CURBSIDE	1	EA
51	088017437	STRAP AL .125X2.98X25.76 ROADSIDE	1	EA
52	088017438	STRAP AL .125X2.98X25.76 CURBSIDE	1	EA

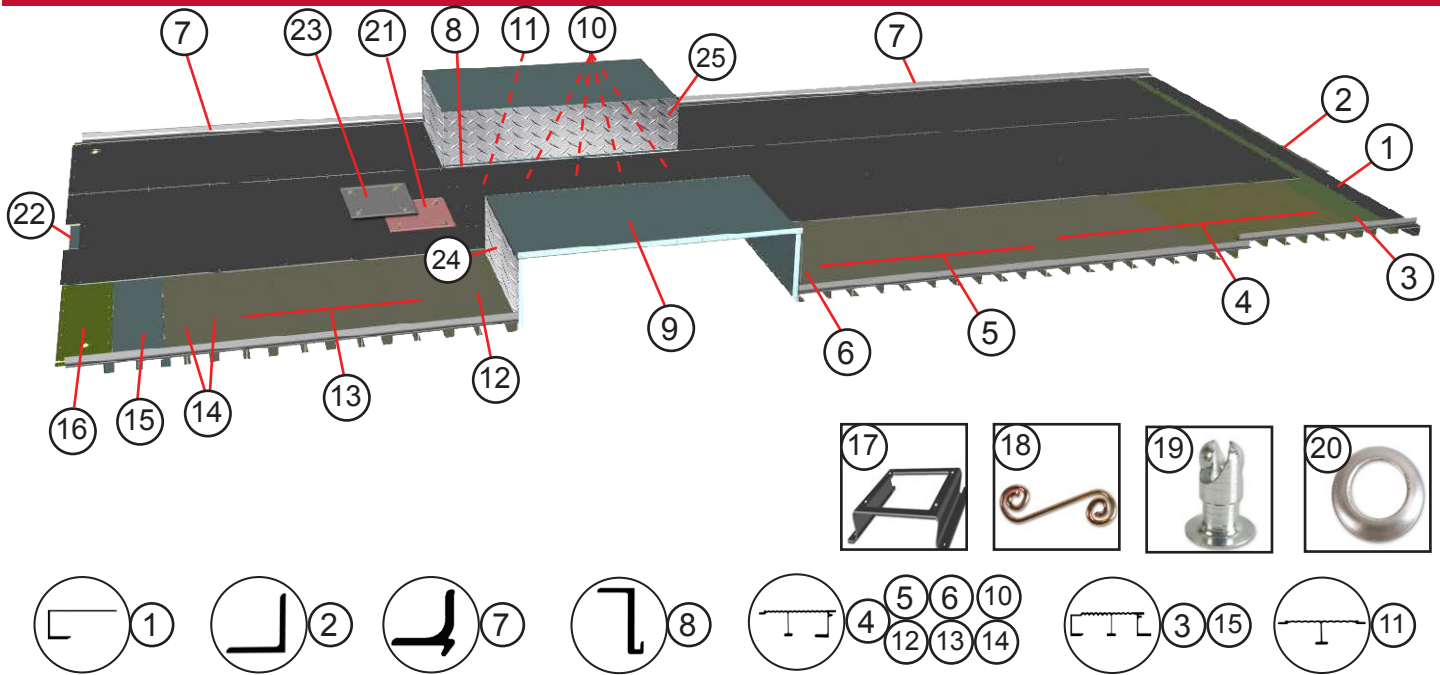




ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	077240400	CROSS MEMBER CENTER AL 456106X41	1	EA
2	145024200	STEP ASSEMBLY ROADSIDE 93W F59	1	EA
3	115024402	CHANNEL CROSS MEMBER ROADSIDE	1	EA
4	115024202	STEP ASSEMBLY CURBSIDE 93W F59	1	EA
5	115024411	LID BATTERY ALD.125X22.25X22.78	1	EA
6	96724608	DAMPENING PAD 45200007X9X20	1	EA
7	115024403	CHANNEL CROSS MEMBER CURBSIDE ALE 456109X27	1	EA
8	1113334	LATCH STEPS	2	EA
9	006324498	HINGE AL .075X1.12X1.75X21	1	EA
10	105024209	TRANSVERSE FLOOR WELDMENT	1	EA
11	40900080	STUD	6	EA
12	40900081	GROMMET HALF	6	EA
13	40900082	SPRING	6	EA
14	083005459	PLATE FILLER AL .07X5.83X13.64 LH	1	EA
15	083005452	PLATE FILLER AL .07X4.08X27.58	1	EA
17	42002055	INSULATION SOUND ABSORBING FLOOR MAT 60X95	2	EA
18	147024418	SHIELD SPLASH BATTERY 45200014X11X17	1	EA
23	147024417	BRACKET SPLASH SHIELD	1	EA
19	090019403	TREAD STEP ALD.08X2.68X27.25 CURBSIDE	1	EA
20	118019400	TREAD TOE BOARD ALD.08X2.63X30.58 ROADSIDE	1	EA
21	118019404	TREAD MAT @ O LINE ALD. .08X2.29X63.41	1	EA
22	118019403	TREAD TOE-BOARD AL.07X7.89X22.64 CURBSIDE	1	EA
24	03M545058	STIFFENER SLIDING WINDOW AL 450003X29.5 DLH	2	EA
25	084024415	RISER CORNER AL. .125X3.5X3.61	1	EA



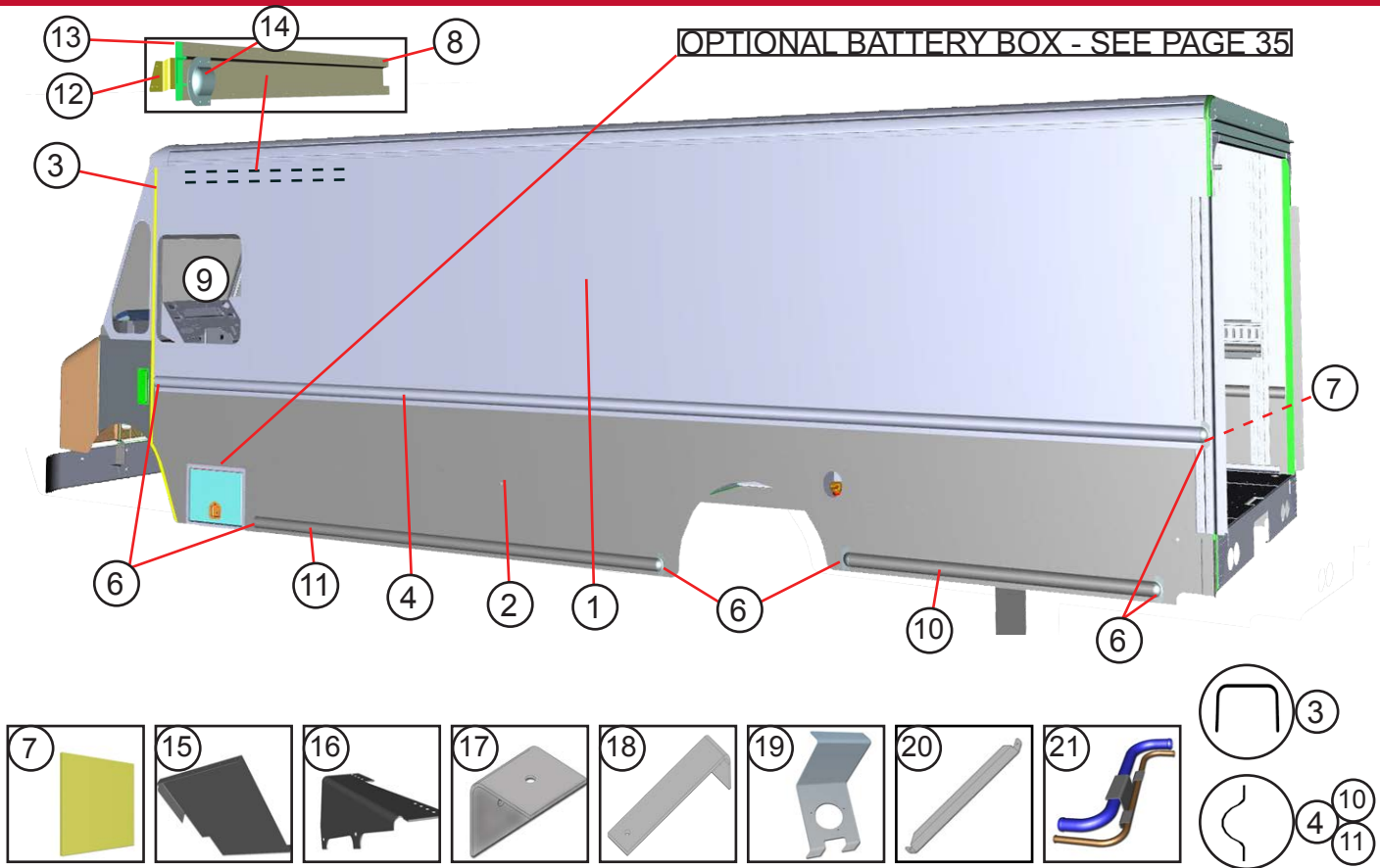
ITEM	PART #	DESCRIPTION	QTY.	UNIT
1	47012658	SEAT SOC ASSEMBLY 3PNT	1	EA
2	47004332	SEAT BASE/PEDESTAL	1	EA
3	47011202	ARM REST SEAT VINYL BLACK	1	EA
4	47004971	SEAT VINYL BLACK DRIVER LUMBAR	1	EA
5	47004972	SEAT HEAD BACK/REST TFTX BLACK	1	EA
6	47004973	SEAT TFTX BLACK FOLDING 16IN. CENTER	1	EA
7	91614300	ANGLE MOUNTING .188X2.84X19.1	1	EA
8	47007912	SEAT BELT W/BOOT 3PNT ORANGE	1	EA
9	98M582030	BRACE SUPPORT STEEL 7GAX9.43X23.43	1	EA
10	47007912	SEAT BELT W/BOOT 3PNT ORANGE	2	EA
11	130070403	WASHER JUMP SEAT BASE AL.125X1.5X1.6	2	EA
NS	145069404	STIFFENER SEAT JUMP AL 450039X72.13	1	EA
NS	083069404	STIFFENER SEAT JUMP AL 450043X72.12	1	EA



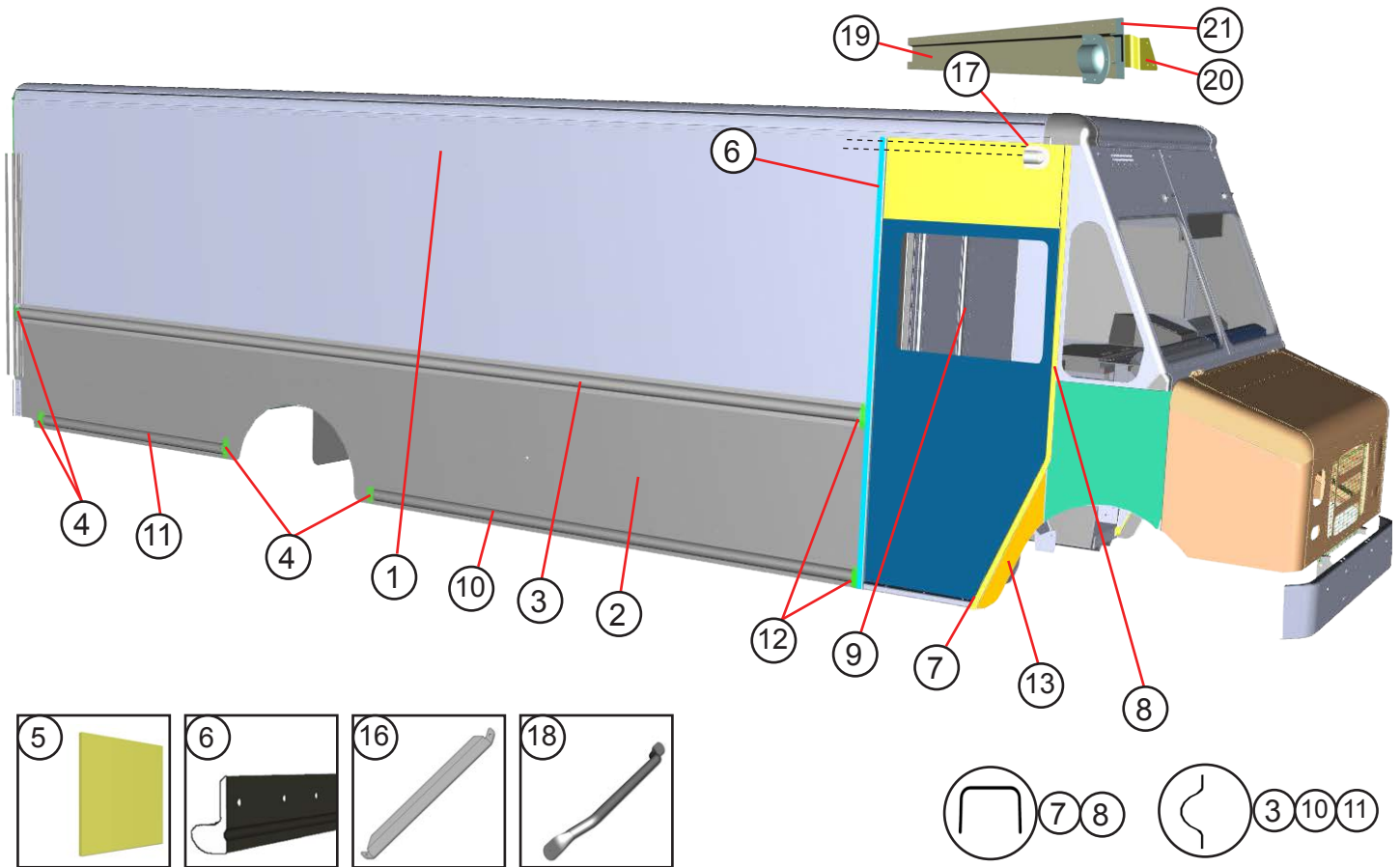
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	083033509	BEAM @ O LINE AL 450088X89.38	1	EA
2	001730412	ANGLE STEP	1	EA
3	45051003	BEAM AL FLOOR FEM-LAP 7X92.19	1	EA
4	45040203	BEAM AL FLOOR M-FEM 8X92.1	9	EA
5	45040103	BEAM AL FLOOR M-FEM 9X92.19	6	EA
6	45040503	BEAM AL FLOOR M-FEM 8.5X92.19	1	EA
7	45030300	ANGLE ATTACH FLOOR TO SIDE X241	2.09	EA
8	95869302	ANGLE W/BX ATTACH AL 450018X44	2	EA
9	95869202	WHEEL BOX ASSEMBLY 93W 10" AL .102	2	EA
10	95869303	BEAM AL FLOOR H/D RIB 9X91.19	4	EA
11	95869304	BEAM AL FLOOR RIB 8X55.62	1	EA
12	45040503	BEAM AL FLOOR H/D RIB 8.5X92.19	1	EA
13	45040103	BEAM AL FLOOR M-FEM 9X92.19	5	EA
14	45040203	BEAM AL FLOOR M-FEM 8X92.1	2	EA
15	45051003	BEAM AL FLOOR FEM-LAP 7X92.19	1	EA
16	128033416	PLATE FILLER REAR AL.102X7.3X92.19	1	EA
17	125012401	SUPPORT ACCESS DOOR AL.125X11.48X17.74	1	EA
18	40900082	SPRING	4	EA
19	40900080	STUD	8	EA
20	40900081	GROMMET HALF	8	EA
21	095032209	ACCESS DOOR ASSEMBLY	1	EA
22	89308450	ANGLE TIE DOWN REAR STEEL .25X2X3X47	1	EA
23	145100417	PANEL ACCT. DOOR OVERLAY ALD.125X10.49X12.5 (ABOVE ITEM 21)	1	EA
24	073101402	WHEEL BOX OVERLAY FRONT AND REAR ALD.08X9.75X24.52	4	EA
25	073101403	WHEEL BOX OVERLAY CENTER PANELS ALD.08X9.62X49.21	2	EA

**FLOOR OVERLAY - DIAMOND PLATE**

FRONT ROADSIDE	FRONT CENTER	FRONT CURBSIDE	REAR ROADSIDE	REAR CENTER	REAR CURBSIDE
138100452	145100415	138100450	138100455	145100416	138100453

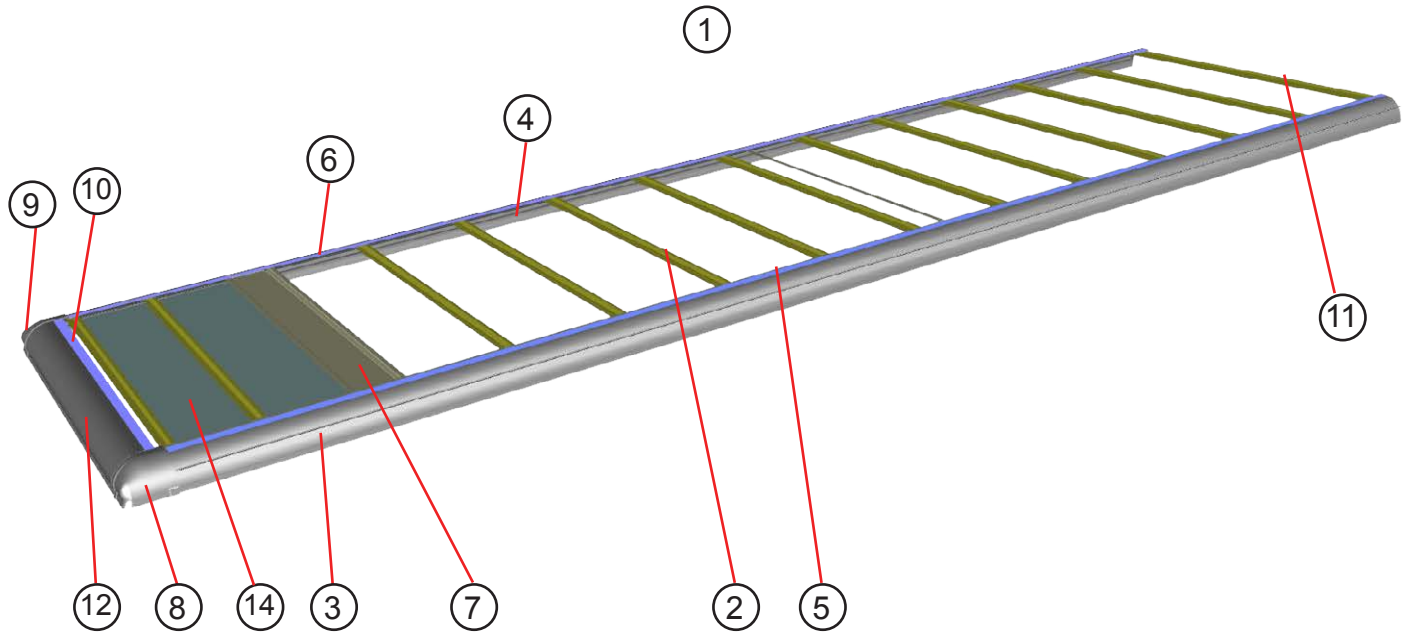


ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	088046432	SIDE UPPER AL .102X60X314.31	1	EA
2	155045407	SIDE LOWER (CALL FOR REAR QUARTER PANEL ONLY)	1	EA
3	088044200	D POST ASSEMBLY (TOP 088044402 - BOTTOM 088044403)	1	EA
4	088039333	RUB RAIL UPPER	1	EA
5	1100800	END CAP FORWARD	1	EA
6	1100799	END CAP REAR	5	EA
7	7600165	FILLER PLATE (UNDER RUB RAIL END-CAPS)	2	EA
8	137042000	STIFFENER ASSEMBLY	1	EA
9	45800062	WINDOW SLIDING	1	EA
10	148039435	RUB RAIL LOWER REAR AL 450002X70.32	1	EA
11	140110400	RUB RAIL LOWER FWD AL 450002X135.5	1	EA
12	96742302	CLIP AL Z .102X3X9.57	1	EA
13	45100074	CAP RAIL END	1	EA
14	47008533	VENT CAP	1	EA
15	115012403	SPLASH PAN FUEL FILL AL.102X27.21X28.42	1	EA
16	115012406	HANGER ANGLE EXTENSION AL.07X6.6X12.96	1	EA
17	82312025	SUPPORT S/PAN	1	EA
18	118012401	SUPPORT FUEL FILL	1	EA
19	115012402	BRACKET FUEL FILL SUPPORT AL.25X11.25X13.36	1	EA
20	001744400	GUSSET FLOOR TO SIDE	5	EA
21	115012400	FUEL FILL EXTENSION F59	1	EA

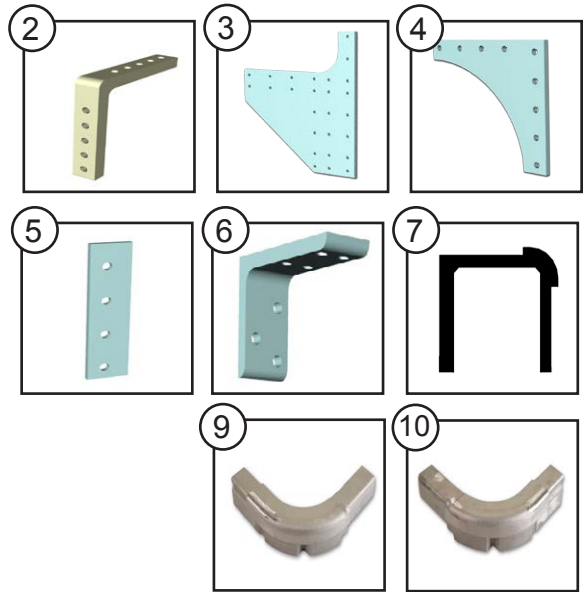
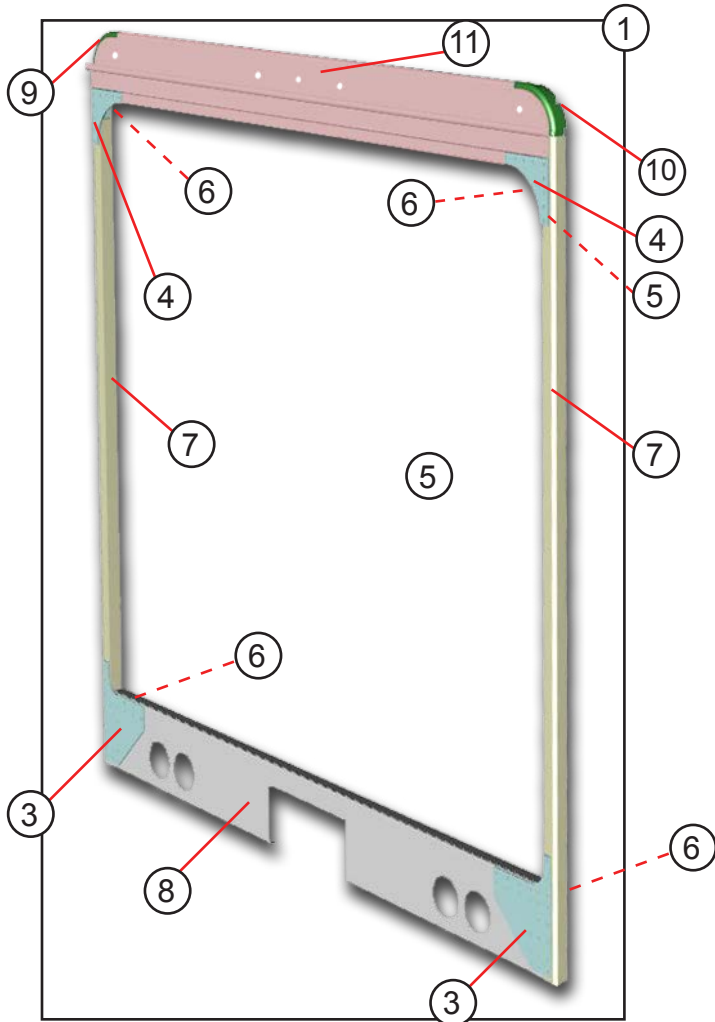


ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	088038332	SIDE UPPER	1	EA
2	155037412	SIDE LOWER (CALL FOR REAR QUARTER PANEL ONLY)	1	EA
3	088039311	RUB RAIL	1	EA
4	1100799	END CAP REAR	4	EA
5	7600165	FILLER PLATE (UNDER RUBRAIL ENDCAP)	2	EA
6	077400401	B POST 85H AL 450274X99.62	1	EA
7	SEE PG 18	DOOR POST BOTTOM	1	EA
8	SEE PG 18	DOOR POST TOP	1	EA
9	45800063	WINDOW SLIDING SASH	1	EA
10	140110400	RUBRAIL LOWER FORWARD AL450002X135.5	1	EA
11	148039435	RUBRAIL LOWER REAR AL450002X70.32	1	EA
12	1100800	END CAP FORWARD	2	EA
13	098022401	SKIRT TAIL CURBSIDE	1	EA
NS	45210009	PANEL DOOR INNER PLASTIC 39.4X40.02RH	1	EA
NS	42002001	INSULATION RFLTX 4FTX3.25FT	1	EA
16	001744400	GUSSET FLOOR TO SIDE	5	EA
17	47008533	VENT CAP	1	EA
18	47001082	GRAB HANDLE 1" AL 31.875L 2.75DP ANZ	1	EA
19	083042401	STIFFENER HEADER AL450328X73.75 RH	1	EA
20	96742302	CLIP AL Z .102X3X9.57 (SEE PG12 ITEM12)	1	EA
21	45100074	CAP RAIL END VENT (SEE PG12 ITEM13)	1	EA

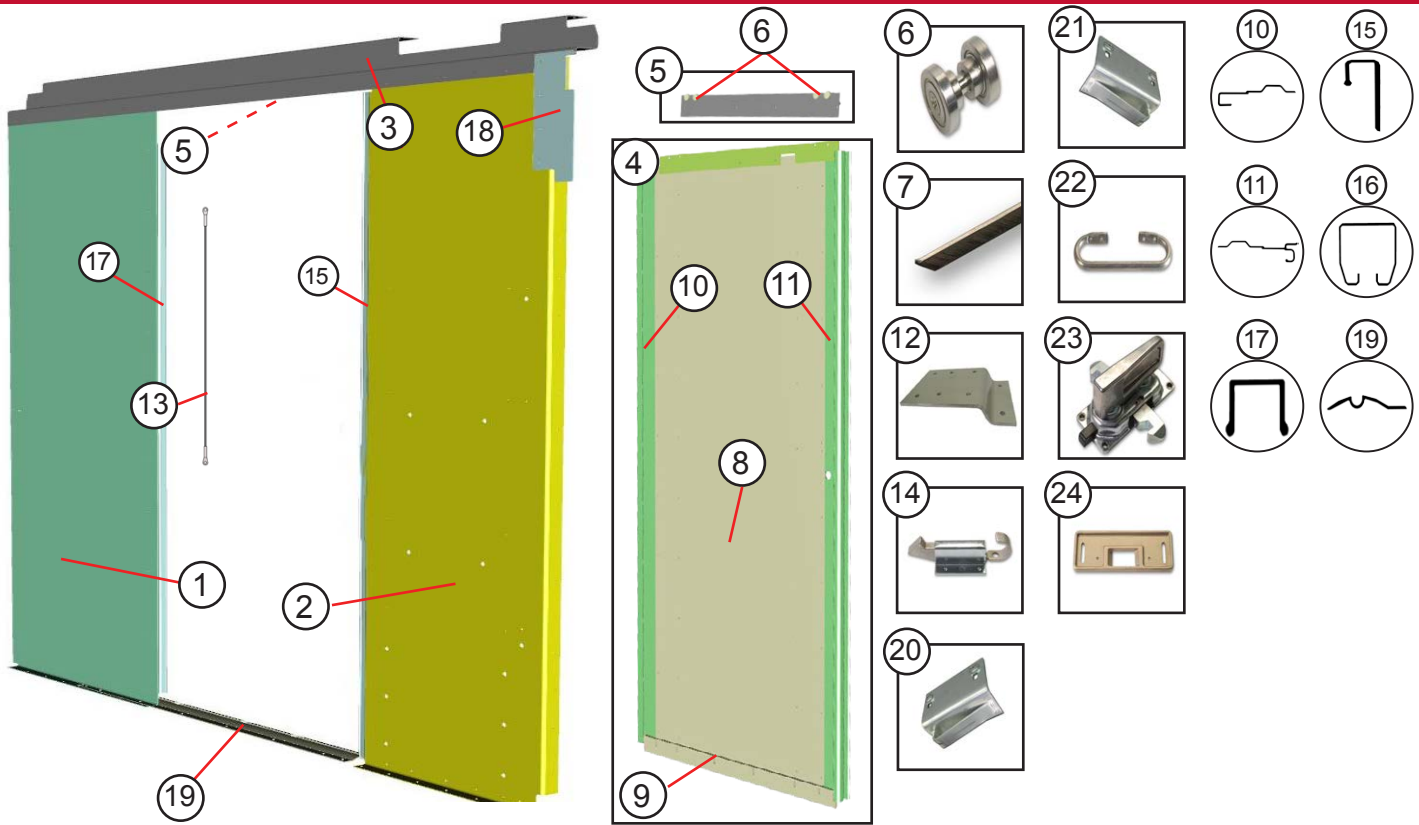




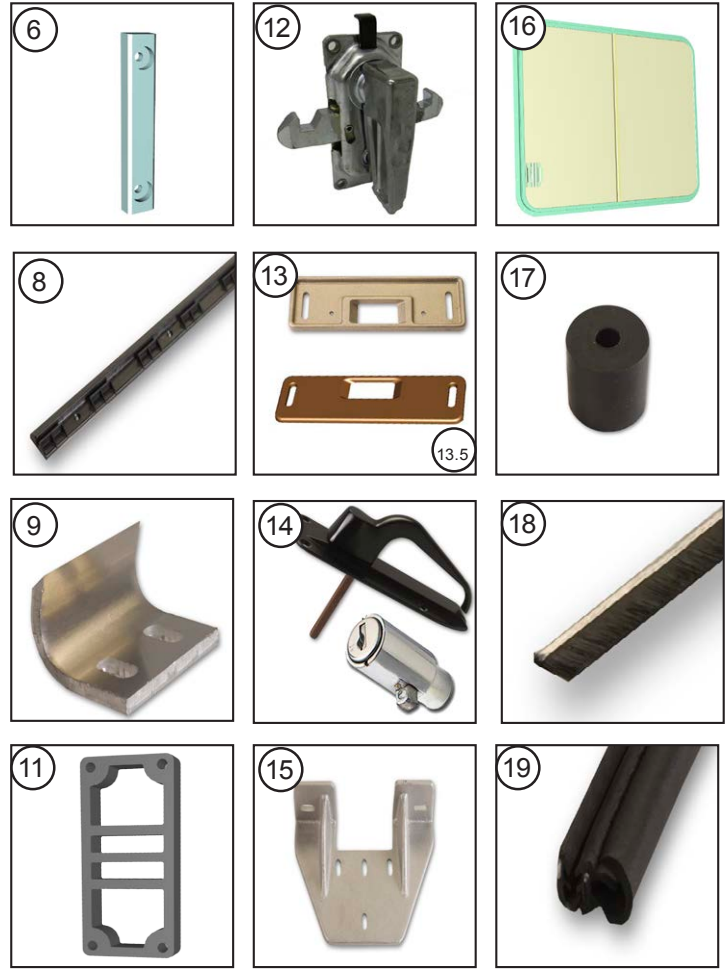
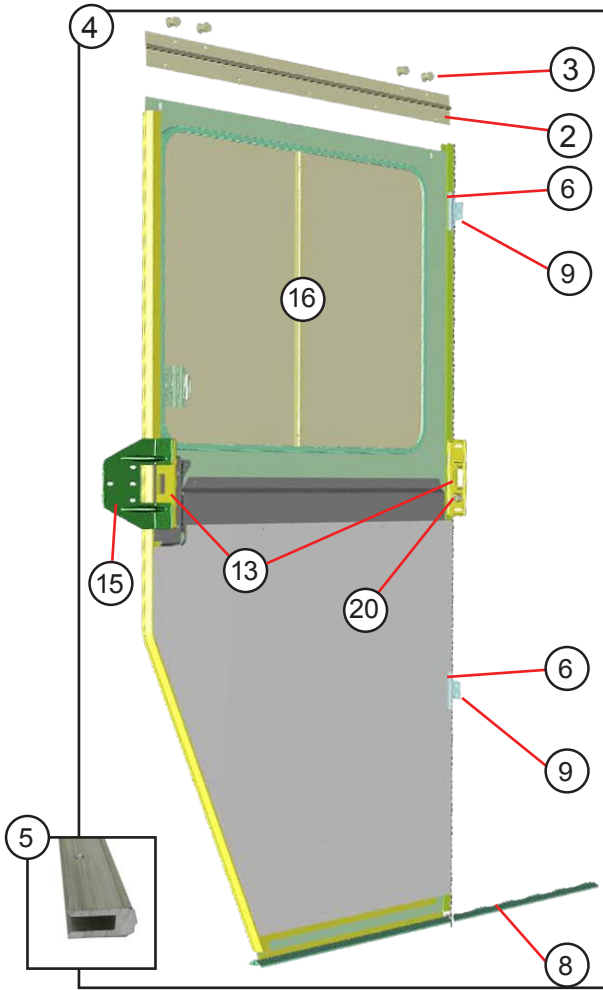
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	088010034	ROOF ASSEMBLY 22' 93W	1	EA
2	45601603	ROOF BOW STEEL 16GA SEC456016 X89.12	13	EA
3	098010421	ROOF RAIL 22' 456144X309.25 ROADSIDE	1	EA
4	098010422	ROOF RAIL 22' 456144X309.25 CURBSIDE	1	EA
5	088010524	RAIL INTERLOCK ROADSIDE	1	EA
6	088010525	RAIL INTERLOCK CURBSIDE	1	EA
7	89310478	ROOF BEAM @ O LINE	1	EA
8	077100400	CORNER CASTING ROADSIDE	1	EA
9	077100401	CORNER CASTING CURBSIDE	1	EA
10	89310506	NOSE ROOF INTERLOCK	1	EA
11	89310507	ROOF INTERLOCK TRANSOM	1	EA
12	083010400	ROOF NOSE	1	EA
NS	45200851	ROOF SKIN FIBERGLASS .075X82.25XFT	25.98	FT
14	083011470	ROOF LINER INSTALLATION FIBERGLASS	1	EA
15	47006610	CLIP PLASTIC FLAT HEAD	52	EA



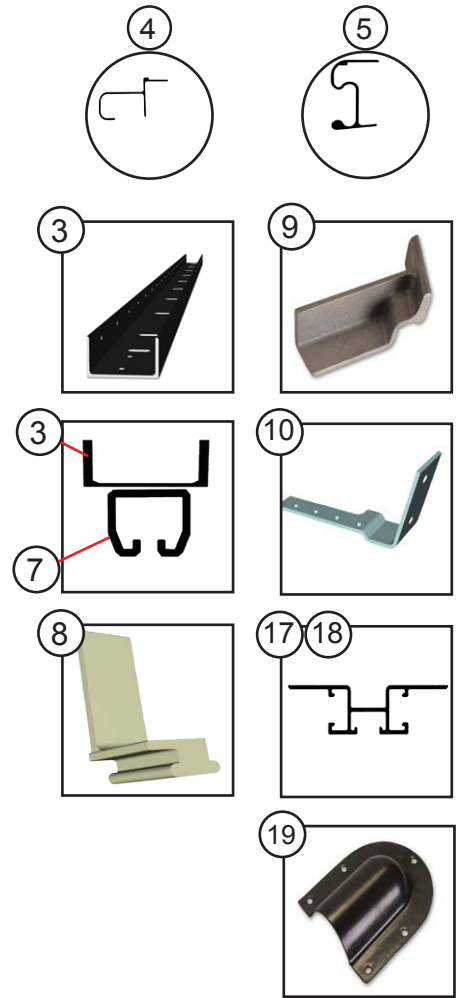
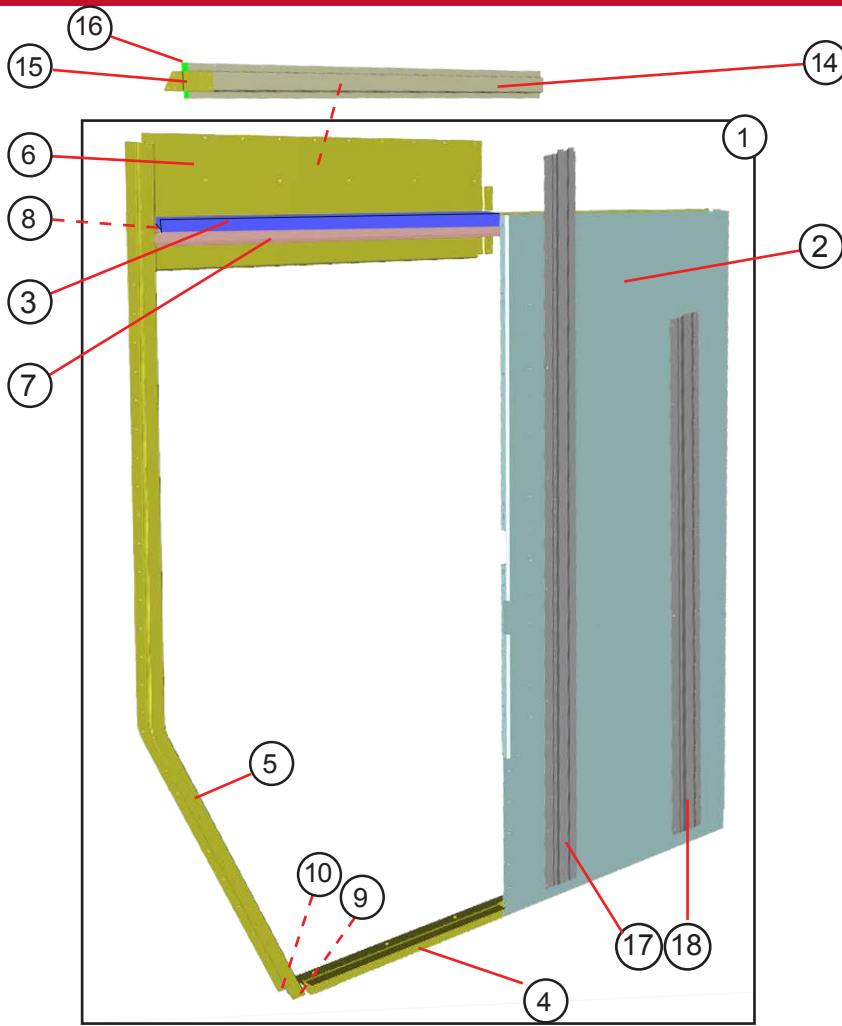
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1		BACK ASSEMBLY 85H 93W F/O RUD N/LAMP N/BX		
2	1126108	ANGLE .62X5.75X5.75X1	2	EA
3	7400206	GUSSET RUD LOWER .25X9.88X13.5	2	EA
4	7400207	GUSSET RUD UPPER .25X7.12X7.38	2	EA
5	7400208	SHIM GUSSET .188X1.38X6	2	EA
6	89353301	CLIP HOLDER 450198X1.25LH/RH	2	EA
7	160053402	CHANNEL POST CORNER AL 450359X91.88	2	EA
8	170053503	SILL REAR 93W AL 450024X89	1	EA
9	45100009	CORNER CAST ROADSIDE	1	EA
10	45100010	CORNER CAST CURBSIDE	1	EA
11	173053502	TRANSOM AL 450266X91.62	1	EA



ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	118070406	PANEL BULKHEAD AL.102X35.34X81.17 ROADSIDE	1	EA
2	118070403	PANEL BULKHEAD AL.102X24.13X81.38 CURBSIDE	1	EA
3	118070410	HEADER BULKHEAD ZEE AL.102X8.9X92.4 ROADSIDE	1	EA
4	118070200	DOOR ASSEMBLY BULKHEAD NO/WINDOW F/PULL 32"	1	EA
5	088070252	HANGER ASSEMBLY W/SEAL BULKHEAD 3.34X32.13	1	EA
6	47006595	BEARING ASSEMBLY	4	PR
7	44008050	SEAL BRUSH TYPE B	1	EA
8	118070403	PANEL DOOR BULKHEAD AL.125X29.37X77.26	1	EA
9	088070516	WEAR STRIP BULKHEAD AL452002X33.75	1	EA
10	118070405	EDGE BULKHEAD DOOR AL450504X77.26 CURBSIDE	1	EA
11	118070404	EDGE BULKHEAD DOOR AL450503X77.26 ROADSIDE	1	EA
12	92537309	PLATE MOUNTING LATCH AL .125X3X5.29	1	EA
13	1113603	CABLE BULKHEAD.125X29 BLACK VINYL .375EYE	1	EA
14	1113046	LATCH FINGER PULL	1	EA
15	118070407	CHANNEL BULKHEAD AL450502X76.15 CURBSIDE	1	EA
16	088070251	TRACK DOOR ASSEMBLY 32" SLID	1	EA
17	118070408	JAMB AL450326X78.37 ROADSIDE	1	EA
18	118070411	PLATE BULKHEAD AL.055X3.56X12.29 CURBSIDE	1	EA
19	96770316	GUIDE DOOR FLOOR AL 450414X47.88	1	EA
20	98770201	STRIKER WELDMENT BULKHEAD ASSEMBLY	1	EA
21	98770202	STRIKER WELDMENT BULKHEAD ASSEMBLY	1	EA
22	90187300	GRAB HANDLE	1	EA
23	1113016	LOCK MECHANISM INNER	1	EA
24	45100093	STRIKER BRONZE D/S REAR	2	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1		SIDE DOOR INSTALLATION (CURBSIDE)		
2	96760203	HANGER ASSEMBLY	1	EA
3	47006595	BEARING (SEE PAGE 16 ITEM 6 FOR ILLUSTRATION)	4	PR
4	118060201	SIDE DOOR ASSEMBLY	1	EA
5	98760306	WEATHER STRIP D/S 450008X25.75	1	EA
6	45200206	SPACER ANTI RATTLE	2	EA
NS	120041000	LATCH KIT (INCLUDES ITEMS 11 AND 12)	1	EA
8	47002766	DOOR GUIDE NYLON	1	EA
9	96760318	CLIP ANTI RATTLE	2	EA
10	44004104	SEAL RUBBER RS FORWARD	1	EA
11	087181	KASON SPACER	1	EA
12	1113016	LATCH	1	EA
13	45100093	STRIKER BRONZE CAST D/S REAR	2	EA
13.5	45100163	STRIKER BRONZE CAST D/S REAR	1	EA
14	47000689	HANDLE BLACK (REMOVABLE LOCK CYLINDER 47001181)	1	EA
15	45100094	BRACKET STRIKER CAST D/S	2	EA
16	45800063	WINDOW SLIDING	1	EA
17	44002011	RUBBER BUMPER	1	EA
18	44008050	SEAL BRUSH TYPE B 1X83.9	1	EA
19	1107270	SEAL TR SCHLEG1426-X999	8	FT



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	077041209	DOOR POCKET ASSEMBLY	1	EA
2	118041401	PANEL DOOR POCKET	1	EA
3	96741303	CHANNEL HEADER	1	EA
4	98741353	NOSE STEP	1	EA
5	077410401	DOOR POST	1	EA
6	077410409	PANEL HEADER	1	EA
7	96741202	TRACK ASSEMBLY	1	EA
8	45100049	GUSSET HEADER CHANNEL TO DOOR POST	1	EA
9	45100105	DOOR POST CASTING LOWER	1	EA
10	001741408	REINFORCEMENT BRACKET	1	EA
11	44004060	SEAL BRUSH TYPE C 1.5X82	1	EA
12	44008050	SEAL BRUSH TYPE B 1X83.9	1	EA
NS	45900001	PLUG WOOD RUB RAIL	1	EA
14	083042400	STIFFENER HEADER	1	EA
15	96742302	CLIP ZEE	1	EA
16	45100074	CAP RAIL END	1	EA
17	093048406	STIFFENER 450595X58.5	1	EA
18	093048412	STIFFENER AL 450595X79.5	1	EA
19	47008533	VENT CAP	1	EA

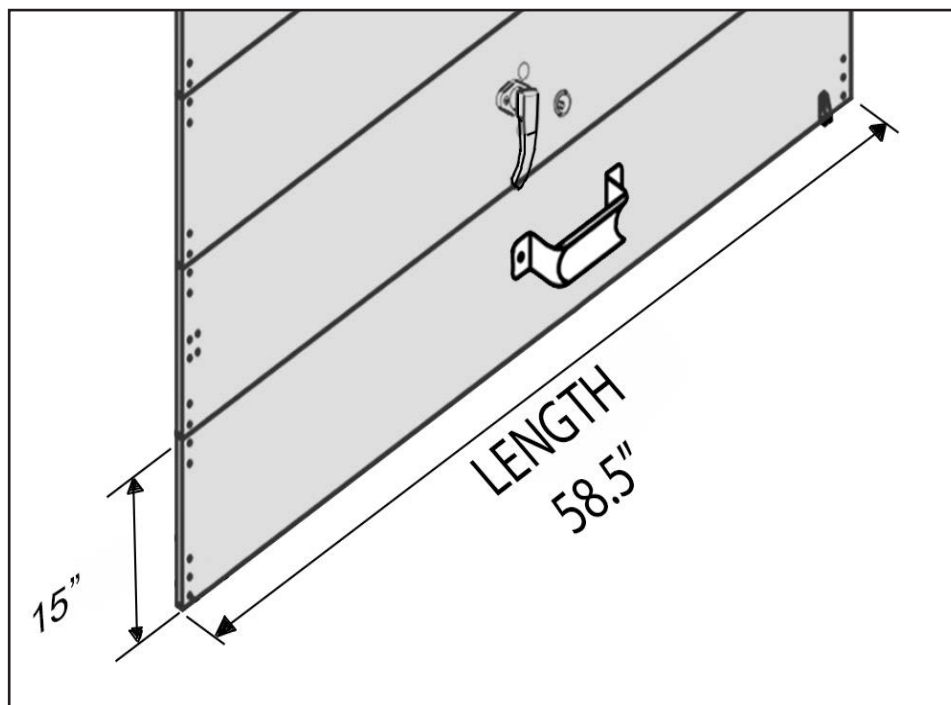


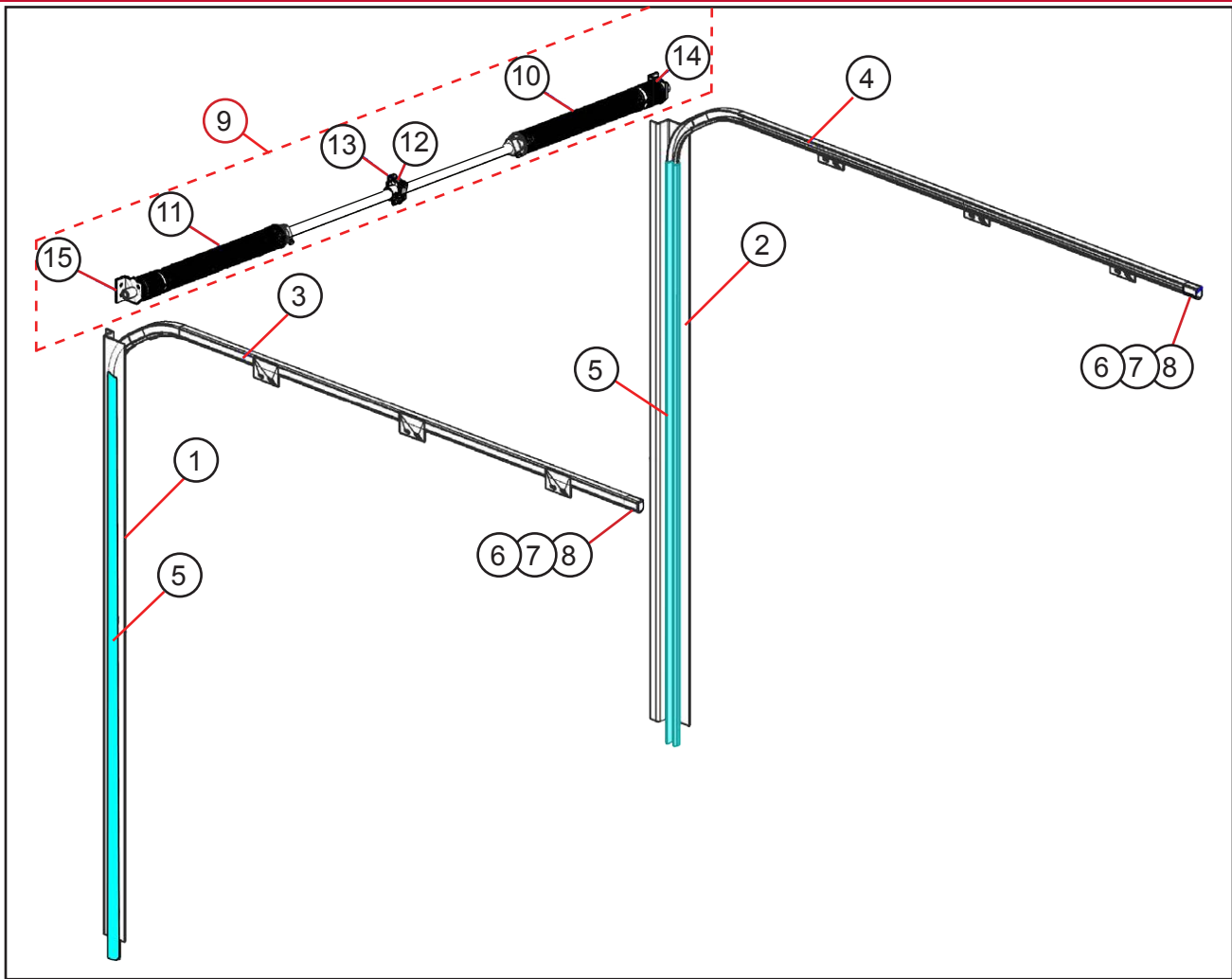


### ROLL-UP DOOR SERIAL NUMBER LOCATION

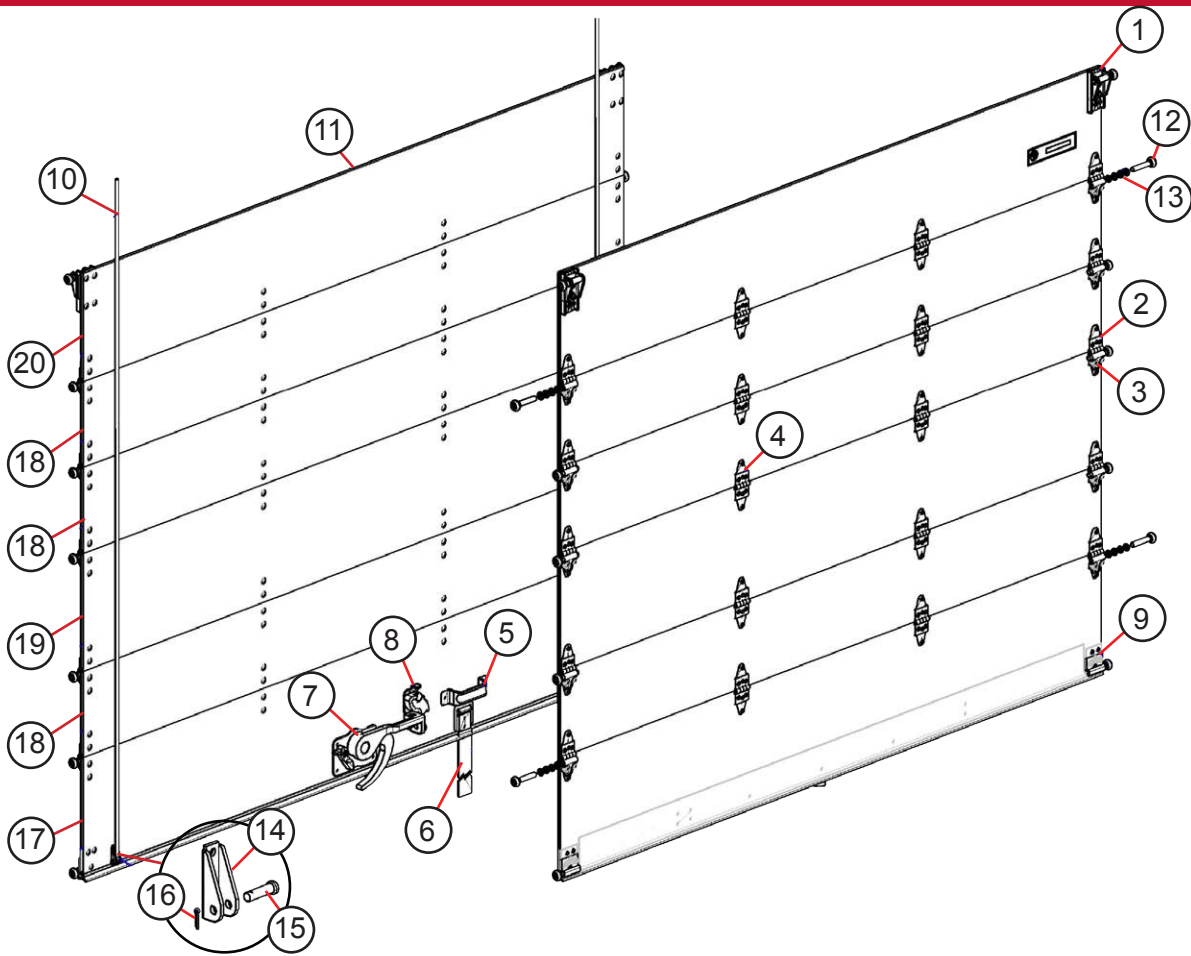
WHEN ORDERING PARTS FOR ROLL-UP DOORS,  
PLEASE PROVIDE THE FOLLOWING INFORMATION.  
THE SERIAL NUMBER LOCATED ON THE INTERIOR TOP PANEL ROADSIDE EDGE.  
THE LENGTH AND HEIGHT OF THE DOOR PANEL(S) TO BE ORDERED.

IN THE EVENT OF A DAMAGED, UN-READABLE OR MISSING SERIAL NUMBER,  
PLEASE TRY TO PROVIDE THE COMPOSITION DETAILS OF THE DOOR PANEL.  
(PLASTIC COATED, ALUMINUM CLAD, PLYWOOD, ETC.)

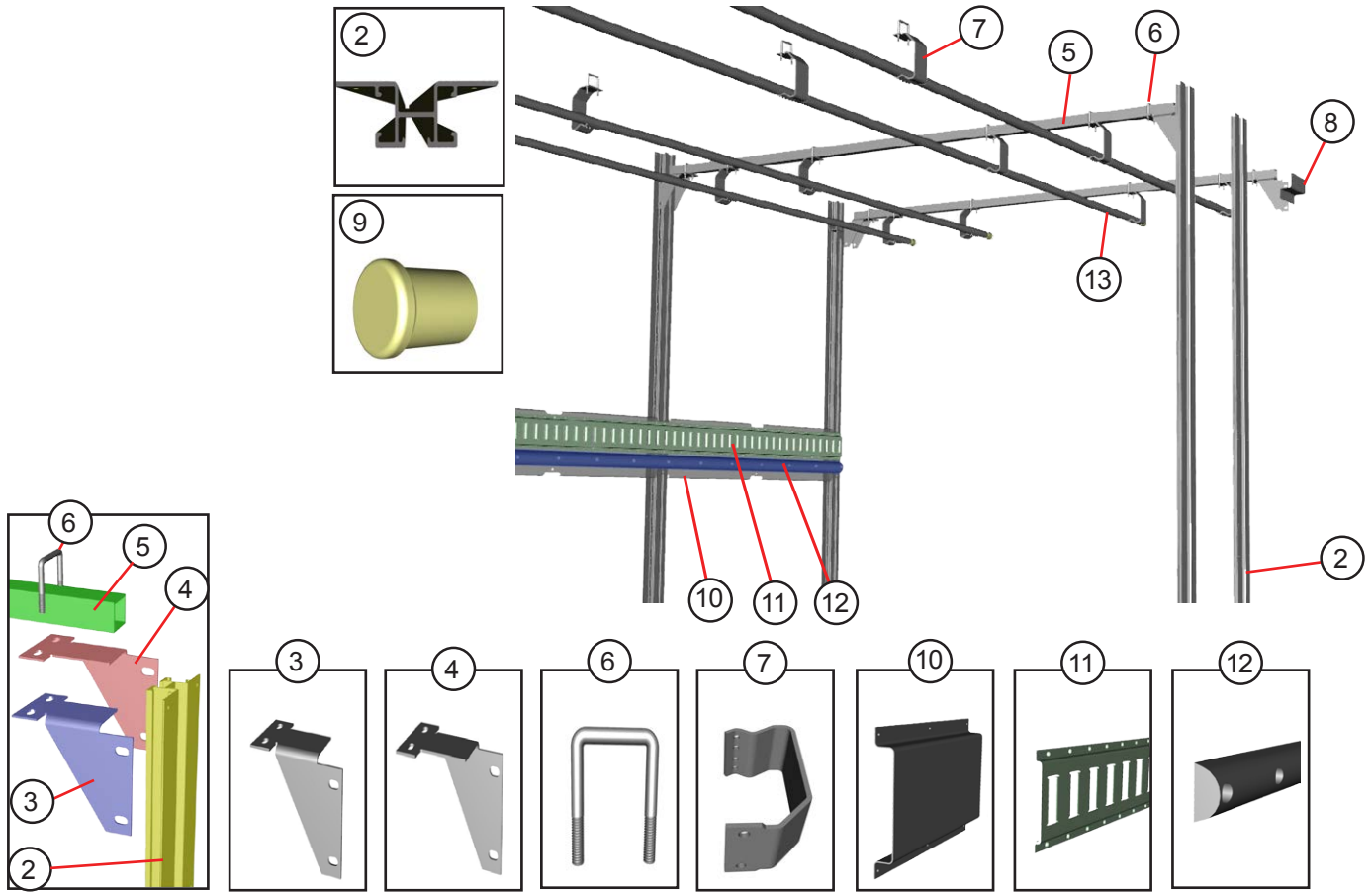




ITEM#	PART #	DESCRIPTION	QTY.	UNIT
1	Call w/ S/N	Vertical Track Assembly - 47004798 - Curbside	1	EA
2	Call w/ S/N	Vertical Track Assembly - 47004798 - Roadside	1	EA
3	Call w/ S/N	Horizontal Track Assembly - 47004798 - Curbside	1	EA
4	Call w/ S/N	Horizontal Track Assembly - 47004798 - Roadside	1	EA
5		Black Brush w/ EPDM Seal Assy w/ Alum Retainer	2	EA
6		1" Black Track Stop	2	EA
7	47106745	1/4-20 x 1 3/4" Hex Head Bolt	2	EA
8	47106746	1/4-20 Kep Nut	2	EA
9	Call w/ S/N	Counterbalance Assembly # 47004798	1	EA
10	Call w/ S/N	Spring w/ Plugs, .182 x 2 3/16" x 28.50" - (RS)	1	EA
11	Call w/ S/N	Spring w/ Plugs, .182 x 2 3/16" x 28.50" - (CS)	1	EA
12		Spring Winder - Winder Assembly	1	EA
13		Base for Spring Winder	1	EA
14		Balancer Bracket - Curbside	1	EA
15		Balancer Bracket - Roadside	1	EA
16				EA



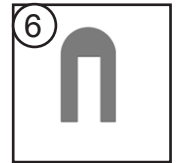
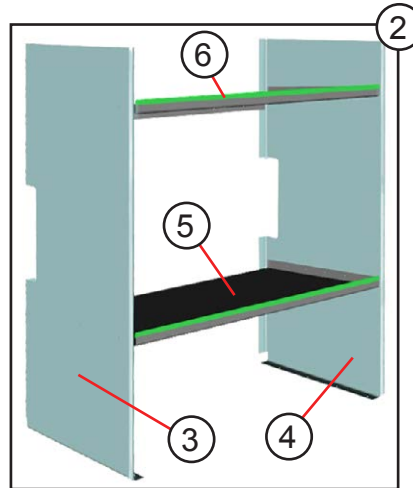
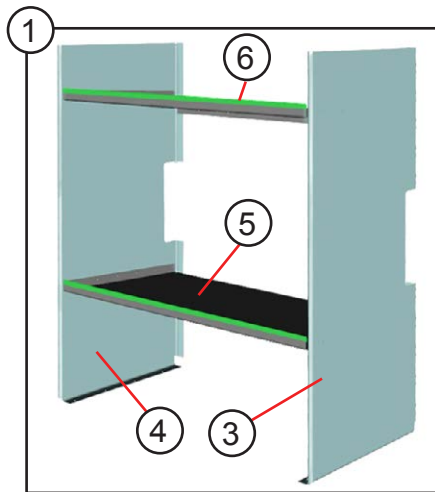
ITEM#	PART #	DESCRIPTION	QTY.	UNIT
1	47106270	Top Closure Complete	2	EA
2	47106797	End Hinge Complete	10	EA
3	47106760	Roller Cover only, for End Hinge	10	EA
4	47106731	Center Hinge	10	EA
5	47106796	Lift Handle - Black	1	EA
6		24" Sewn Pull Strap w/ 6" Sewn Loop - Black Retainer	1	EA
7		Maximum Security Lock Assembly	1	EA
8		Keeper Assembly	1	EA
9	47106705	Bottom Roller Bracket Assm, 1" roller	2	EA
10	47106727	95" 7 x 19 SS Cable 1/4" Metal Eye	2	EA
11	Call w/ S/N	Aluminum Top Panel Seal w/ Standard Lip	1	EA
12	47106270	1" HD Solid Steel Roller	12	EA
13	47106718	Spacer Washers	54	EA
14	47106762	Cable Anchor Bracket	2	EA
15	47106706	Cable Anchor Bracket Pin	2	EA
16	47106719	Cotter Pin	2	EA
17	Call w/ S/N	1/4" Composite Bottom Panel Complete	1	EA
18	Call w/ S/N	1/4" Composite Intermediate Panel	3	EA
19	Call w/ S/N	1/4" Composite Intermediate Panel	1	EA
20	Call w/ S/N	1/4" Composite Top Panel	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	118095001	PIPE RACK INSTALLATION	1	EA
2	093048412	STIFFENER (STIFFENER SHORT OVER W/BOX 093048415 X4)	19	EA
3	093095414	BRACKET PIPE RACK ROADSIDE (2 PER TUBE)	1	EA
4	093095415	BRACKET PIPE RACK CURBSIDE (2 PER TUBE)	1	EA
5	45601158	TUBE STEEL 14GA 1.3125X252 (AT DOOR POCKET 45601159)	1	EA
6	45601155	U BOLT SQUARE .31-18 X 2 X 2.375 (6 PER TUBE)	1	EA
7	45601153	HANGER BRACKET STEEL 7GAX5.5 PIPE RACK (4 PER TUBE)	1	EA
8	093095406	ZEE PIPE RACK	1	EA
9	45601152	END CAP RUBBER 1.25" OD BLACK	1	EA
10*	098102439	HAT E/TRACK AL.125X10.79X134.45	1	EA
11*	098102437	E/TRACK HORZ 1101531X105.95	1	EA
12*	098102435	PROTECTIVE RUBBER BUMPER E/TRACK 1107307X117	1	EA
13	45601156	TUBE STEEL 11GA 1.5X1.5X89.50 SQ	1	EA

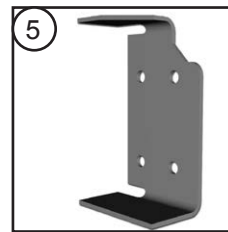
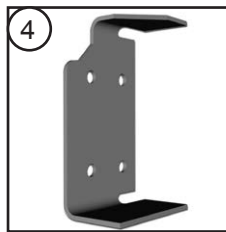
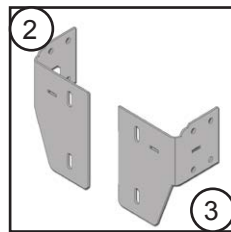
\* Items 10, 11 and 12 - Only the longest lengths of materials used are shown above.

E/TRACK HORZ	14"- 098102440	105.95"-098102437	120"- 1101531		
HAT E/TRACK	28"- 098102441	110.5"- 098102436	117.75"-098102401	122.25"-098102403	134.45"-098102439
RUBBER BUMPER	23.98"-098102434	28"- 083102409	112.6"- 083104410	112.95"-098102438	117"- 098102435

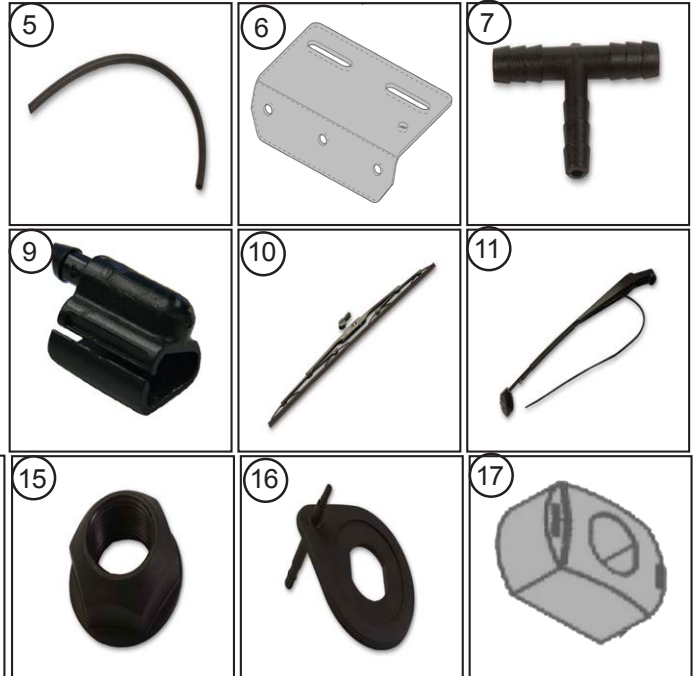
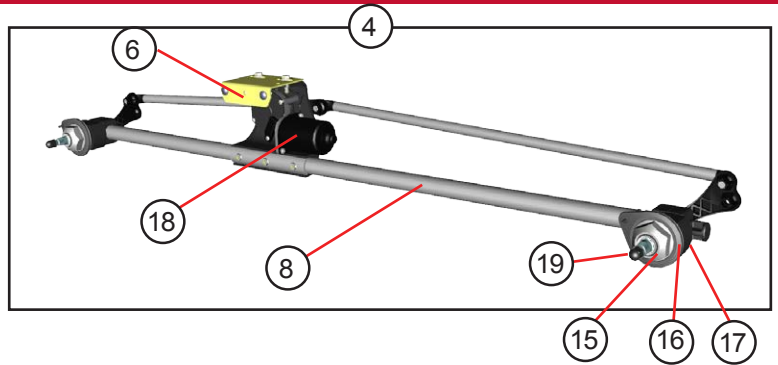


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	118105206	SHELF ASSEMBLY OVER WHEEL BOX LH	1	EA
2	118105207	SHELF ASSEMBLY OVER WHEEL BOX RH (OPTIONAL)	1	EA
3	118105409	PANEL SHELF END AL.102X26.21X46.28	2	EA
4	118105410	PANEL SHELF END AL.102X26.21X46.28	2	EA
5	118105428	SHELF PANEL AL.102X26.51X45.81	4	EA
6	118105404	WEAR STRIP SHELF LIP AL. X43"	4	EA

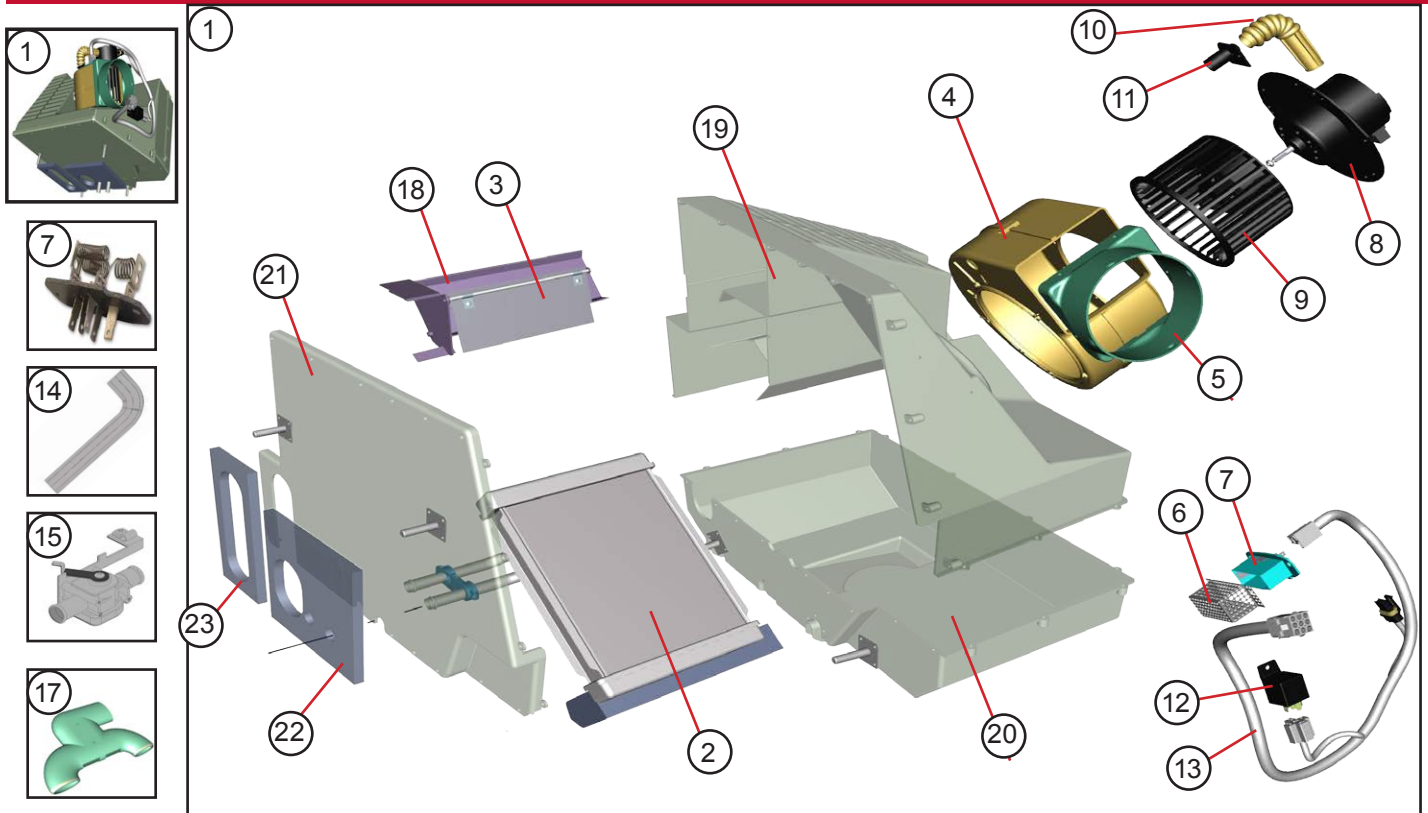




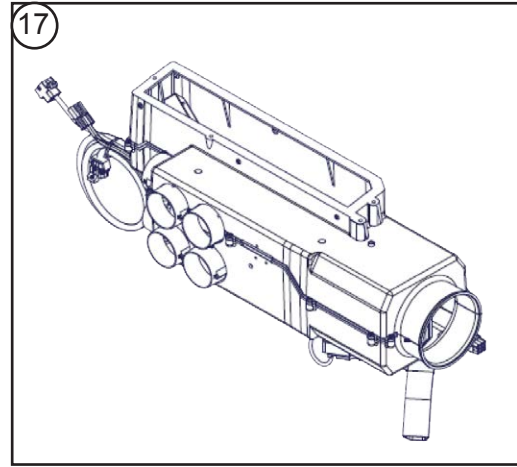
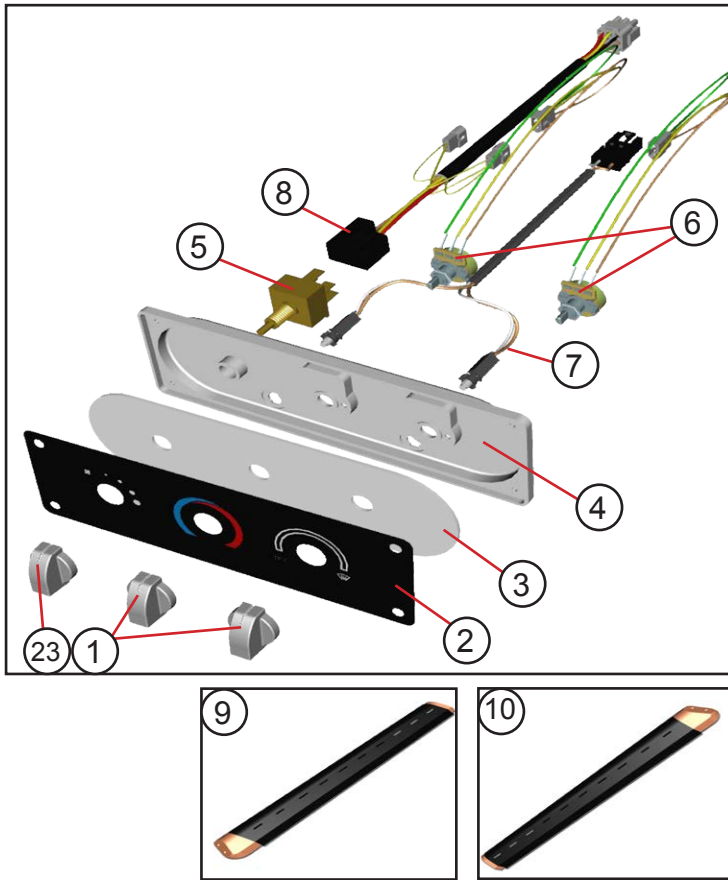
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	004057457	BUMPER STEEL FRONT 93W 11IN RC	1	EA
2	115008200	BUMPER FRONT WELDMENT ASSEMBLY LH	1	EA
3	115008201	BUMPER FRONT WELDMENT ASSEMBLY RH	1	EA
4	115008402	BRACKET BUMPER STEEL 7GA X4.5X12.56 LH	1	EA
5	115008403	BRACKET BUMPER STEEL 7GA X4.5X12.56 RH	1	EA



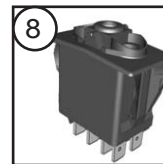
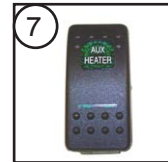
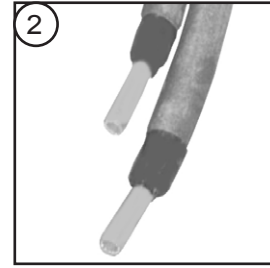
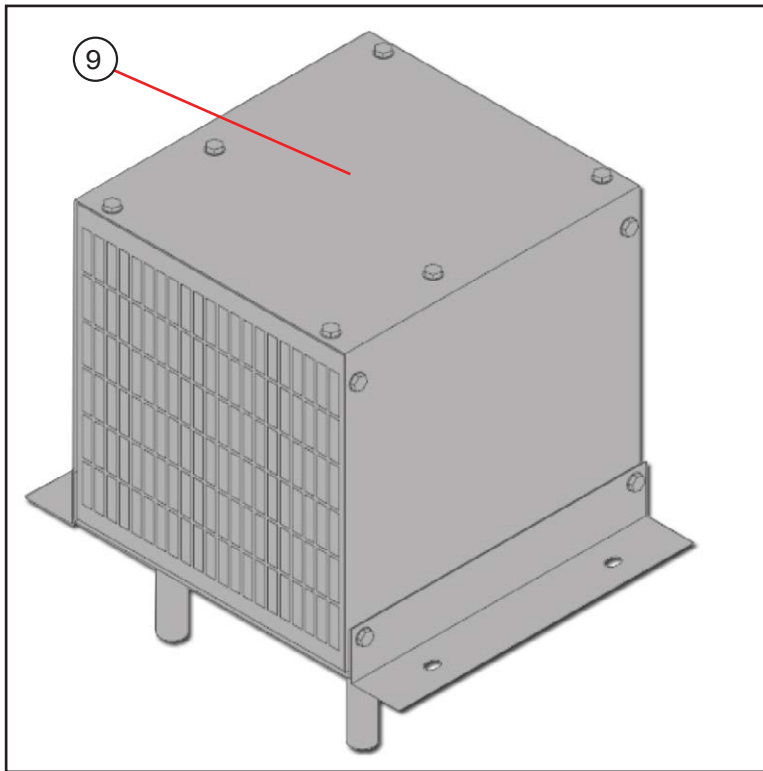
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
2	47005624	MIRROR ASSEMBLY ROADSIDE	1	EA
3	47005625	MIRROR ASSEMBLY CURBSIDE	1	EA
4	117363001	WINDSHIELD WIPER INSTALLATION (INCLUDES ITEMS 5,6,7 AND 8)	1	EA
5	1107122	HOSE .188 ID WSW	12	FT
6	083055454	BRACKET WIPER MOTOR	1	EA
7	1101694	TEE WSW U/T	1	EA
8	47004188	WIPER SYSTEM TUBULAR 2 PIVOT	1	EA
9	47004271	WET KIT (SPRAY NOZZLE AND HOSE) (RETAINER CLIP 47004272)	1	EA
10	47004134	BLADE 24IN BLACK	1	EA
11	47004206	ARM WSW WET 22IN RADIAL BLACK	1	EA
12	47004505	RESERVOIR W/PUMP WSW	1	EA
13	003705413	BRACKET MOUNTING RESERVOIR	1	EA
14	46021115	CLIP BODY LARGE PAN	1	EA
15	47005901	NUT	2	EA
16	47005902	PIVOT COVER	2	EA
17	47005903	SPACER	2	EA
18	47005900	MOTOR WINDSHIELD WIPER	1	EA
19	81600189	ACORN NUT	2	EA



ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	555001014	HEATER ASSEMBLY	1	EA
2	47008760	HEATER COIL W/GASKET & CLAMP	1	EA
3	47008753	DOOR W/SEAL	1	EA
4	47008754	BLOWER HOUSING	1	EA
5	47008755	BLOWER ADAPTER	1	EA
6	47008732	RESISTER CAGE	1	EA
7	47008357	RESISTER	1	EA
8	47008756	BLOWER MOTOR	1	EA
9	47008757	BLOWER WHEEL	1	EA
10	47008730	VENT TUBE	1	EA
11	47008731	VENT TUBE ADAPTOR	1	EA
12	47008716	RELAY	1	EA
13	47008758	HARNES	1	EA
14	47008580	FORMED HEATER HOSE	2	EA
15	555002053	VALVE WATER	1	EA
17	090080401	DUCT FOOT DUMP SPECIAL	1	EA
18	N/A	AC PARTITION - PART OF HEATER ASSEMBLY	1	EA
19	N/A	HOUSING UPPER - PART OF HEATER ASSEMBLY	1	EA
20	N/A	HOUSING LOWER - PART OF HEATER ASSEMBLY	1	EA
21	N/A	HOUSING BACK - PART OF HEATER ASSEMBLY	1	EA
22	21-01201	GASKET - PART OF HEATER ASSEMBLY	1	EA
23	21-01202	GASKET - PART OF HEATER ASSEMBLY	1	EA

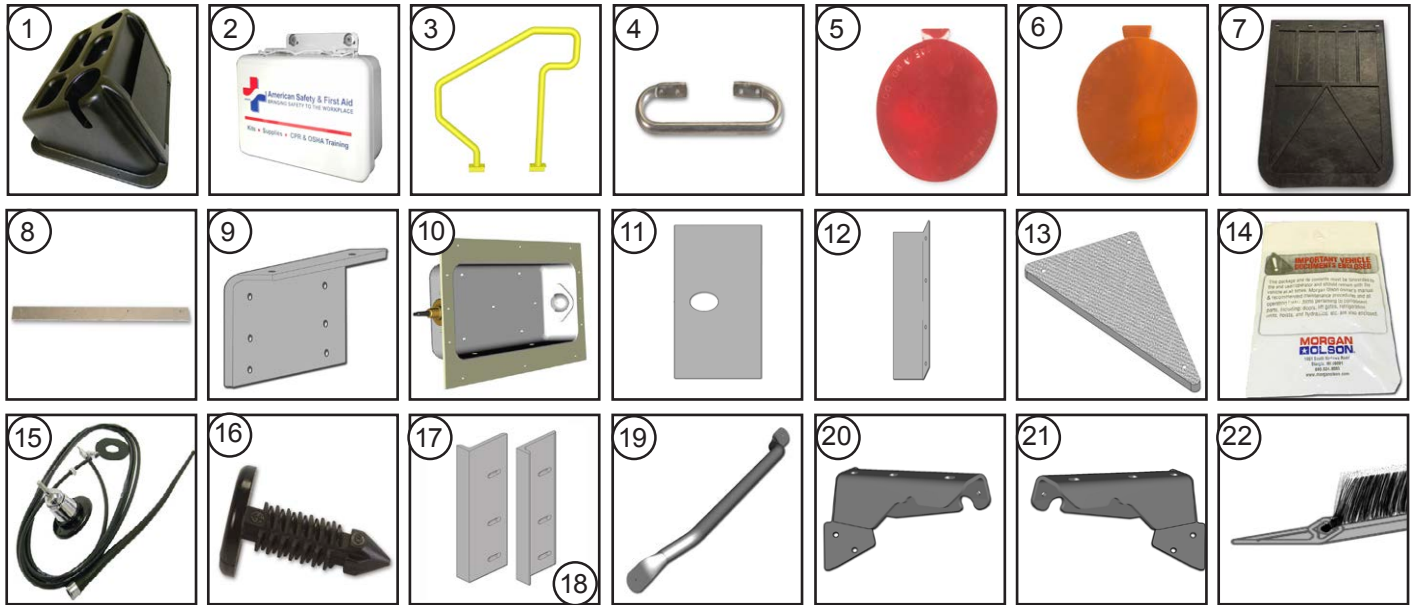


ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	47008706	KNOB	2	EA
23	47008735	KNOB	1	EA
2	47008707	DECAL	1	EA
3	47008708	LIGHT PANEL	1	EA
4	47008709	CONTROL PANEL	1	EA
5	47008700	BLOWER SWITCH	1	EA
6	47008710	POTENTIOMETER SWITCH	2	EA
7	47008711	HARNES ILLUMINATION W/BULBS	1	EA
8	47008712	HARNES BLOWER MOTOR	1	EA
9	555001723	DEFROST DUCT CURBSIDE	1	EA
10	555001724	DEFROST DUCT ROADSIDE	1	EA
11	093080400	HOLD DOWN PLATE DEFROSTER DUCTS	4	EA
NS	555001523	HOSE DEFROSTER 2.5X16	2	EA
13	555001524	HOSE DEFROSTER 2.5X30	2	EA
NS	555001525	HOSE DEFROSTER 2.5x38	1	EA
15	555002003	COLLER FRESH AIR INTAKE	1	EA
16	555001715	LUVER BALL	6	EA
17	555001321	DUCT HVAC	1	EA
18	107027405	BRACKET HEATER VENT	1	EA
20	555001533	HOSE BLOWER HEATER/DEFROSTER 5"X7.5"	1	EA
21	005780402	MOUNTING PLATE	1	EA
22	002080400	BRACKET HEATER CONTROL AL .102X3X11.67	1	EA



ITEM #	PART #	DESCRIPTION	QTY	UNIT
PG29	137080002	AUXILIARY HEATER INSTALLATION (ALL ITEMS THIS PAGE)	1	EA
2	44001026	HOSE HEATER SLC .62IDXFT	34	FT
3	46004416	GROMMET 1ID .25 MATERIAL THICK	5	EA
NS	05M279200	HARNESS ROCKER SWITCH	1	EA
NS	007388322	HARNESS JUMPER Y 2WR P&P X120	1	EA
NS	007388326	HARNESS JUMPER Y 2WR P&P X72	1	EA
7	46023616	SWITCH ROCKER ACTUATOR ONLY AUXILIARY HEATER	1	EA
8	46023617	SWITCH ROCKER BASE ONLY SPDT ON-OFF-ON	1	EA
9	47008587	HEATER AUXILIARY 16.6K BTU 2 SPEED	1	EA

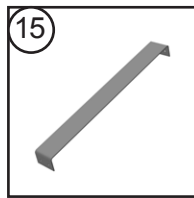
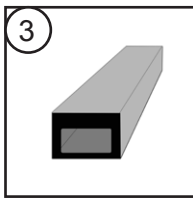
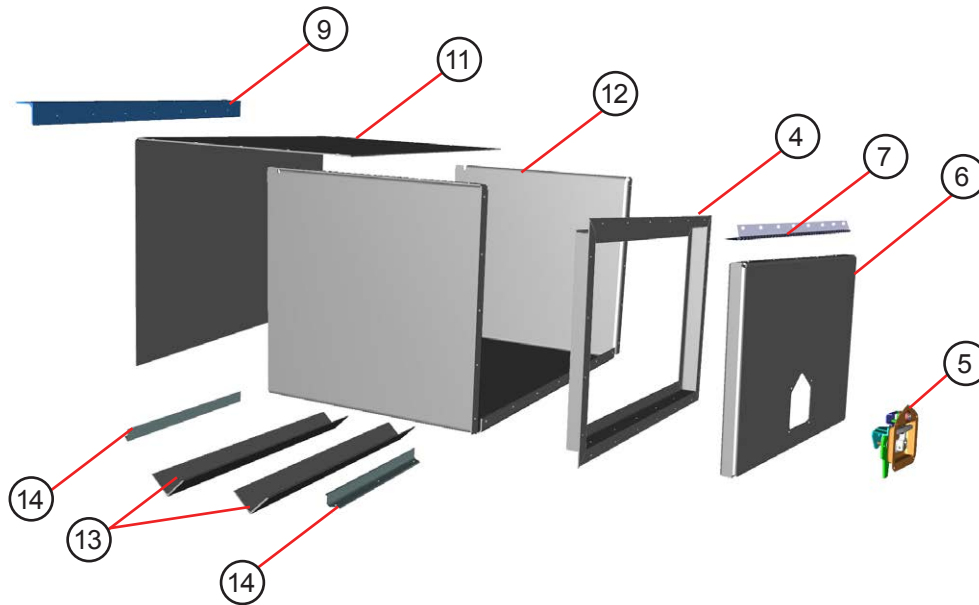




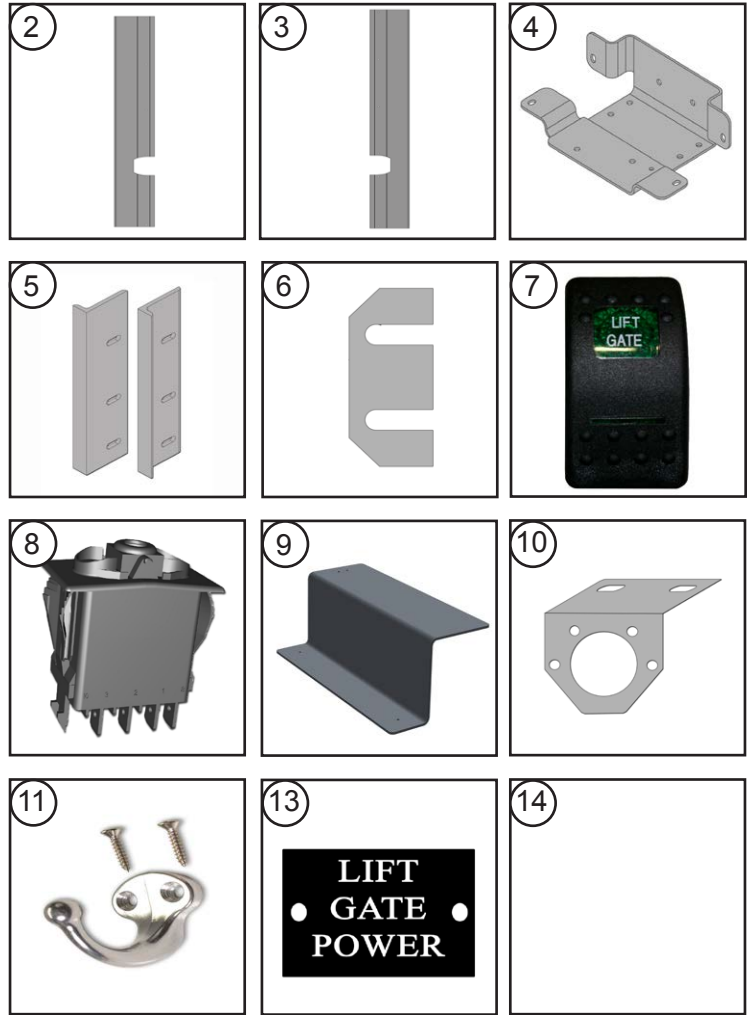
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47009653	CENTER CONSOLE CUP HOLDER	1	EA
2	007301001	FIRST AID KIT	1	EA
3	47001053	GRAB RAIL REMOVABLE	1	EA
4	90187300	GRAB HANDLE 9" , OFFSET	1	EA
5	46025017	REFLECTOR RED SPITFIRE 2.88 DIA.	4	EA
6	46025018	REFLECTOR AMBER SPITFIRE 2.88 DIA.	2	EA
7	1107308	MUD FLAPS 20X24 BLACK NO LOGO	1	PR
8	7504428	RETAINER MUD FLAPS	2	EA
9	80795014	ANGLE RETAINER MUD FLAPS	2	EA
10	090092207	LICENSE PLATE BOX ASSEMBLY (BOX ONLY 1106120)	1	EA
NS	95801001	TIE DOWN KIT	1	EA
11	78331095	PLATE TIE DOWN	23	EA
12	97650306	ANGLE TIE DOWN	2	EA
13	138027418	RUBBER PAD 42002055X4.75X11	1	EA
14	43004362	BAG PLASTIC DOCUMENT WALK-IN	1	EA
15	46025559	ANTENNA	1	EA
16	47006630	CLIP PLASTIC ROUND HEAD 1.32X1.34	15	EA
17	092050410	ANGLE LOWER LIFT GATE AL1126236X11 ROADSIDE	1	EA
18	092050411	ANGLE LOWER LIFT GATE AL1126236X11 CURBSIDE	1	EA
19	47001063	GRAB HANDLE 1" AL 31.875L 2.75DP ANODIZE	1	EA
20	115006200	OUTRIGGER WELDMENT CHASSIS PREP LH	1	EA
21	115006201	OUTRIGGER WELDMENT CHASSIS PREP RH	1	EA
22	47106596	SEAL SIDE BRUSH 1" (HEADER 1.5" - 47106599 QTY. 1) RUD	2	EA
NS	095024413	ANGLE COMP VERTICAL AL.25X5.75X18 LH	1	EA
NS	095024414	ANGLE COMP VERTICAL AL.25X5.75X18 RH	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	90187300	GRAB HANDLE-CAB INTERIOR LH	1	EA
2	072124003	DVIR BRACKET	1	EA
3	47009547	REFLECTOR KIT - TRIANGLES	1	EA
4	47009548	BRACKET REFLECTOR FLARE KIT	1	EA
5	097061000	SUN VISOR INSTALLATION CURBSIDE (VISOR ONLY 47005504)	2	EA
6	090061400	BRACKET SUN VISOR CURBSIDE	1	EA
7	117024400	BATTERY SHIELD	1	EA
8	44002011	RUBBER BUMPER BULKHEAD DOOR	1	EA
9	47009621	FIRE EXTINGUISHER W/BRACKET & MET STRAP	1	EA
10	47001001	CHANNEL NUT W/ SPRING	1	EA
11	42002055	SOUND ABSORBING FLOOR MAT 60X95	2	EA
12	104019400	TOE-BOARD TRIM ROADSIDE	1	EA
13	104019401	TOE-BOARD TRIM CURBSIDE	1	EA
14	48200141	CAMERA BACKUP CLR BLLT (BRACKET 146079401)	1	EA
15	093116410	INSULATION DASH WALL	1	EA
16	1107270	SEAL ENGINE BOX LID	8	FT
18	115028401	ENGINE BOX INSULATION 42002056X14.34X29.88	1	EA
19	115028402	ENGINE BOX INSULATION 42002056X13.55X27.09	1	PR
20	098005405	ENGINE BOX INSULATION 42002056X15.09X33.05	1	EA
21	115028403	ENGINE BOX INSULATION 42002056X17.43X32.37	1	EA
22	115028404	ENGINE BOX INSULATION 42002056X8.09X22.61	1	EA
NS	098137400	PLATE STEP OVERLAY FBG. .125X8.5X24.12	1	EA
NS	098137401	PLATE STEP OVERLAY FBG .125X7.75X22	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	145024201	BATTERY BOX AUX (FULL ASSEMBLY)	1	EA
2	130009204	DOOR ASSEMBLY BAT/BOX (ITEMS 4,5,6,7)	1	EA
3	44004079	SEAL RUBBER "D" .25 X .375	7	FT
4	130009203	OUTER FRAME ASSEMBLY BATTERY BOX	1	EA
5	47001498	HANDLE T BLACK W/LK RH (GASSKET - 47001499)	1	EA
6	130009415	DOOR BAT/BOX AL .125X17.63X24.63	1	EA
7	130009414	HINGE STAINLESS 47007794X21	1	EA
8	138009200	BAT/BOX AUX ASSEMBLY	1	EA
9	138009401	ANGLE SUPPORT BAT/BOX AL 45018X29	1	EA
10	47000921	HOLD BACK DOOR	1	EA
11	134024401	WRPR BATTERY BOX AL .102X27.88X33.17	1	EA
12	138009400	WRPR COMPARTMENT AL .102X17.96X59.32	1	EA
13	124024409	SUPPORT ANGLE AL 450523X25.5	2	EA
14	138009401	ANGLE SUPPORT BAT/BOX AL 45018X29	2	EA
15	130024409	BRACE BATTERY BOX AL .125X3.17X30.43	1	EA
NS	130024408	LINER RUBBER BATTERY BOX	1	EA



\* Weld on and bolt on lift gates are not interchangeable.

If adding, back modifications may be needed. Please call and we will be happy to assist you.

ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47005451	LIFT GATE MAXON 90X36+12 BOLT-ON	1	EA
2	092050412	MOUNTING LIFT GATE AL 450596X65.29 LH	1	EA
3	092050413	MOUNTING LIFT GATE AL 450596X65.29 RH	1	EA
4	122092401	BRACKET MOUNTING AL .102X10.07X10.52	2	EA
5	092050410	ANGLE LOWER LIFT GATE AL 1126236X11 LH	1	EA
5	092050411	ANGLE LOWER LIFT GATE AL 1126236X11 LH	1	EA
6	092050406	SHIM LIFT GATE AL .25X1.25X64.88	2	EA
7	46023619	SWITCH ACTUATOR ONLY LIFT GATE POWER	1	EA
8	46023611	SWITCH BASE ONLY SPDT	1	EA
9	172125400	BRACKET LIFT GATE PENDANT AL .102X9.68X12	1	EA
10	46013413	BRACKET TRAILER RECEPICLE	1	EA
11	1113494	HOOK (FOR PENDANT - HAND HELD CONTROLLER)	1	EA
NS	47006100	RING (FOR PENDANT - HAND HELD CONTROLLER)	1	EA
13	45200252	PLACARD PLASTIC LIFT GATE POWER	1	EA

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ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	090087401	FILLER PLATE WIRING	1	EA
2	46026414	FLASHER FOR TTL LED APPLICATIONS	1	EA
3	46021115	CLIP LARGE BODY	1	EA
3	46021114	CLIP MEDIUM BODY (SAME APPEARANCE AS ITEM 3)	1	EA
4	48200113	HARNESS - CABLE CAMERA TO MONITOR	1	EA
5	88117437	HARNESS CRADLE HAND COMPUTER	1	EA
NS	46003017	LAMP INT WIPER	1	EA
NS	008300402	LABEL FUSE BLOCK FCC 2008 STRK CURBSIDE	1	EA
NS	008300401	LABEL FUSE BLOCK FCC 2008 STRK ROADSIDE	1	EA
6	46030011	FAN 2 SPEED NO SWITCH 270 CFM	1	EA
7	46023605	SWITCH FAN ROCKER SPDT ON-OFF-ON	1	EA
8	46023614	SWITCH ROCKER ACTUATOR ONLY BLINKING GREEN DASH	1	EA
9	46002637	LAMP DOME REC LED (3 LOAD / 1 CAB)	1	EA
10	46023611	SWITCH ROCKER BASE ONLY SPDT	1	EA
11	115085005	AMBIENT AIR TEMP SENSOR F59	1	EA
12	115085401	BRACKET HORN MOUNTING AL.125X3.25X4.12	1	EA
13	46003022	LAMP PILOT GREEN BLANK	1	EA
14	115000400	LABEL FUSE BLOCK LH	1	EA
14	115000401	LABEL FUSE BLOCK RH	1	EA
15	46023310	SWITCH WIPER INT SIGNAL ASSEMBLY	1	EA





ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	44000052	GROMMET A/I#28866	1	EA
2	1107072	GROMMET	1	EA
3	46001344	LAMP CLEARANCE MARKER LED NO PC AMBER	1	EA
3	46001339	LAMP CLEARANCE MARKER LED PC - AMBER X7	1	EA
3	46001362	LAMP CLEARANCE MARKER LED PC - AMBER X1	1	EA
4	46001340	LAMP CLEARANCE MARKER LED NO PC - RED X7	1	EA
5	46025612	RADIO AM/FM/WB/MON/BT/NAV DBL DIN (HARNESS - 46024562)	1	EA
6	46025590	SPEAKER 6.5 IN.	1	PR
7	46000213	HEADLAMP RECTANGLE ASSEMBLY	1	EA
8	46000615	LAMP PARK/TURN LED (SHOWN WITH GROMMET 46004403)	1	EA
9	46023508	SWITCH ROCKER CAB DOME SPST ON-OFF	1	EA
10	46023603	SWITCH ROCKER FRONT CARGO DOME SPDT ON-ON	1	EA
11	999391026	SWITCH ROCKER LOAD DOME SPDT	1	EA
12	46001905	LAMP AUX S/LH + RH TURN BAR (GROMMET 1107109)	1	EA
13	078092400	BRACKET MOUNTING CRADLE (ITEM 20)	1	EA
14	100092400	BRACKET DOME LAMP MOUNTING (3 LOAD / 1 CAB)	1	EA
15	46001342	GROMMET FOR CLEARANCE MARKER LED	1	EA
16	46002425	LAMP LICENSE PLATE (2 USED)	1	EA
17	47006065	RING TUBE STEEL 4IN ROUND DOME LAMPS (3 LOAD / 1 CAB)	1	EA
18	45200254	LABEL PLACARD LAMP COURTESY	1	EA
19	45200252	LABEL PLACARD LIFT GATE POWER	1	EA
20	46027696	CRADLE HAND COMP	1	EA
21				

PAGE #	PART #	DESCRIPTION	QTY.	UNIT
38	007381203	HARNESS MID BODY MARKERS	1	EA
39-40	007391210	HARNESS ROOF TO NOSE	1	EA
41	007392398	HARNESS LAMP STEP WELL RH/DA SW/BAT	1	EA
42	05M279200	HARNESS ROCKER SWITCH	1	EA
43	090093202	HARNESS JUMPER CARGO DOME LAMP	1	EA
44-45	093093203	HARNESS ROOF 21/24FT6IN	1	EA
46	093093205	HARNESS TRANSOM CHMSL READY M100	1	EA
47	102084201	HARNESS ROCKER SWITCH JPR FOR OPT	1	EA
48	102092202	HARNESS T LIFT GATE SOLOINOID POWER CONTROL	1	EA
49-51	115084202	HARNESS COMMAND CENTER F59	1	EA
52	115084203	HARNESS FUSE CENTER F59	1	EA
53	115085202	HARNESS HOOD F59 W/ HORN	1	EA
54	115088201	HARNESS JUMPER INSTRUMENT PANEL	1	EA
55	115088202	HARNESS JUMPER I/P WPR F59	1	EA
56	132087204	HARNESS LIFT GATE TRANSOM TO LG	1	EA
57	132088201	HARNESS BATTERY NEG 2GA 24"	1	EA
58	132088206	HARNESS BATTERY POS 2GA BRKR 24"	1	EA
59	152088200	HARNESS JUMPER BATTERY SEPERATOR GND	1	EA
60	46024562	HARNESS RADIO POWER SPEAKER	1	EA
61	46025591	HARNESS SPEAKERS	1	EA
62	47004506	HARNESS PIG TAIL PUMP WINDOW WASHER	1	EA
63	88117437	HARNESS JUMPER TEE GNRC	1	EA

DRAWING NO. 007381203		REV.	SHT
DESCRIPTION			1 OF 1
REV.	DESCRIPTION	CHK.	DATE
	RELEASE TO PRODUCTION		

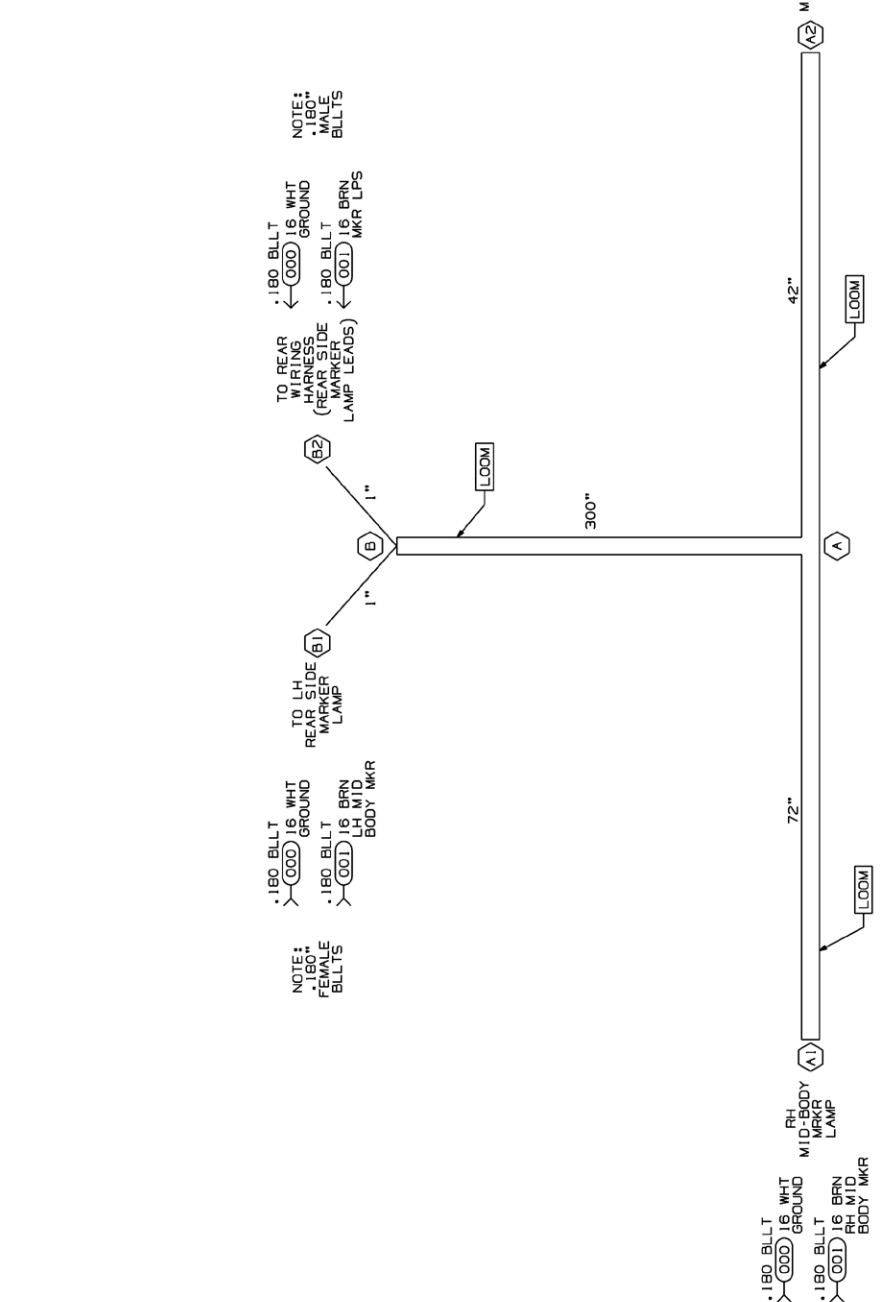
8. VENDOR MAY REPLACE POLYMER WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. DETAILS SHOWN IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTENT OPENS, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M-O FABRICATION IF NECESSARY.
4. TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

**PROPRIETARY**  
 This drawing shall be used only to fabricate or assemble the hardware shown. It is not to be used for any other purpose. All dimensions are in inches unless otherwise noted. All dimensions are to be held to the closest tolerance possible. It is the responsibility of the customer to verify the dimensions of the hardware before fabrication.



GENERAL STANDARDS UNLESS OTHERWISE NOTED: XXXX # .100			
1. MATERIALS: M.O. APPROVED.	2. FINISH: ALL DIMENSIONS ARE TO BE HELD TO THE CLOSEST TOLERANCE POSSIBLE.		
3. DIMENSIONS: ALL DIMENSIONS ARE TO BE HELD TO THE CLOSEST TOLERANCE POSSIBLE.	4. DIMENSIONS: ALL DIMENSIONS ARE TO BE HELD TO THE CLOSEST TOLERANCE POSSIBLE.		
TMC	TMC	DATE	DATE
02JAN08	02JAN08	08-0001	02JAN08
DO NOT SCALE			
NAME: HARNESS MID-BODY MARKERS 200B (SEE TRUCK) P&P .180 BLLTS			
SHT	DRAWING NO.	SCALE	REV.
1 OF 1	007381203	NONE	

CIRCUIT GAUGE	COLOR	END POINTS	FUNCTION
.000	16 WHT	A1,A2,B1,B2	GROUND
.001	16 BRN	A1,A2,B1,B2	SIDE MARKER LAMPS

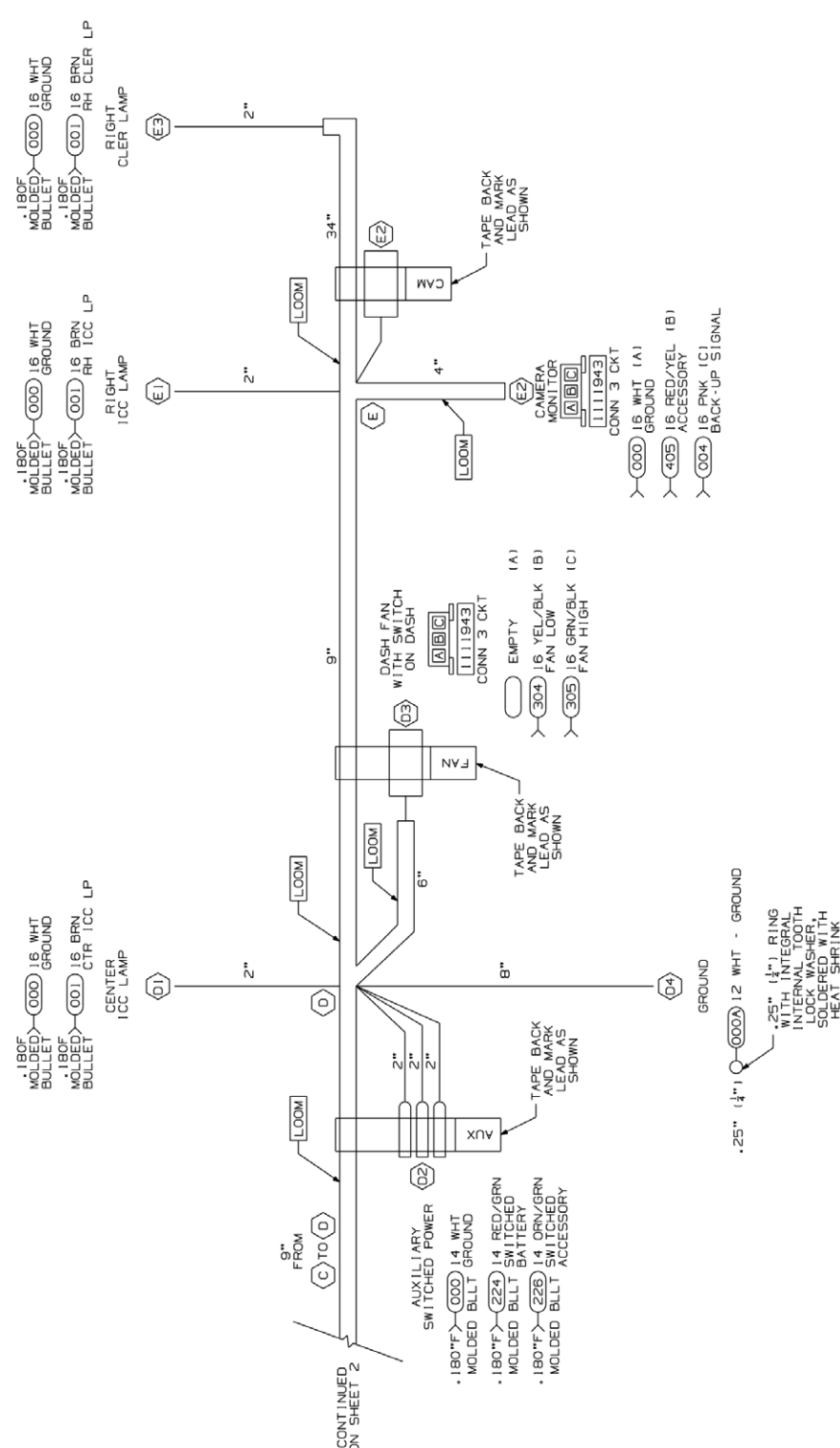


**HARNESS AND LOOM TOLERANCES**

UP TO 60"	= -0/+2"
60" TO 100"	= -0/+4"
100" TO 200"	= -0/+5"
200" TO 400"	= -0/+8"
400" TO 600"	= -0/+7"
OVER 600"	= -0/+8"

BO TO BO = -0/+2"  
 TOLERANCE IS NOT ACCUMULATIVE. LENGTH APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

DRAWING NO.	REV	SHT
007391210	A	1 OF 2
DESCRIPTION	REV	REV NO
RELEASE FOR PRODUCTION	CHK	DATE
A. REDRAWN & REVISED	DEF	3/17/14
	DR	DATE



10. VENDOR TO GREASE FEMALE BULLET TERMINALS.
9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH SOLDER AND ADJUSTIVE LINED HEAT SHRINK TUBING.
4. TAPE (1111096): 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GAL WIRE.

**NOTES:**

**PROPRIETARY**

This is a proprietary document. It is not to be distributed outside of the Morgan Olson organization. It is the property of Morgan Olson. It is to be used only for the purpose of manufacturing and repair. It is not to be used for any other purpose. It is not to be used for any other purpose. It is not to be used for any other purpose.

<b>MORGAN OLSON</b>	
GENERAL STANDARDS UNLESS OTHERWISE NOTED:	JAN 1 2010
1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.	
2. FOR ALL PARTS ALL PARTS CONFORM TO THE MORGAN OLSON QUALITY CONTROL SYSTEM.	
3. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.	
4. BREAKOUT POINTS SHALL BE AT THE CENTER OF THE BREAKOUT POINT UNLESS OTHERWISE NOTED.	
5. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.	
6. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.	
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100. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.	

**HARNESS AND LOOM TOLERANCES**

UP TO 60" : -0/+2"  
 60" TO 100" : -0/+4"  
 100" TO 200" : -0/+5"  
 200" TO 400" : -0/+8"  
 400" TO 600" : -0/+8"  
 OVER 600" : -0/+8"  
 BO TO BO : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

BASED ON 005391200

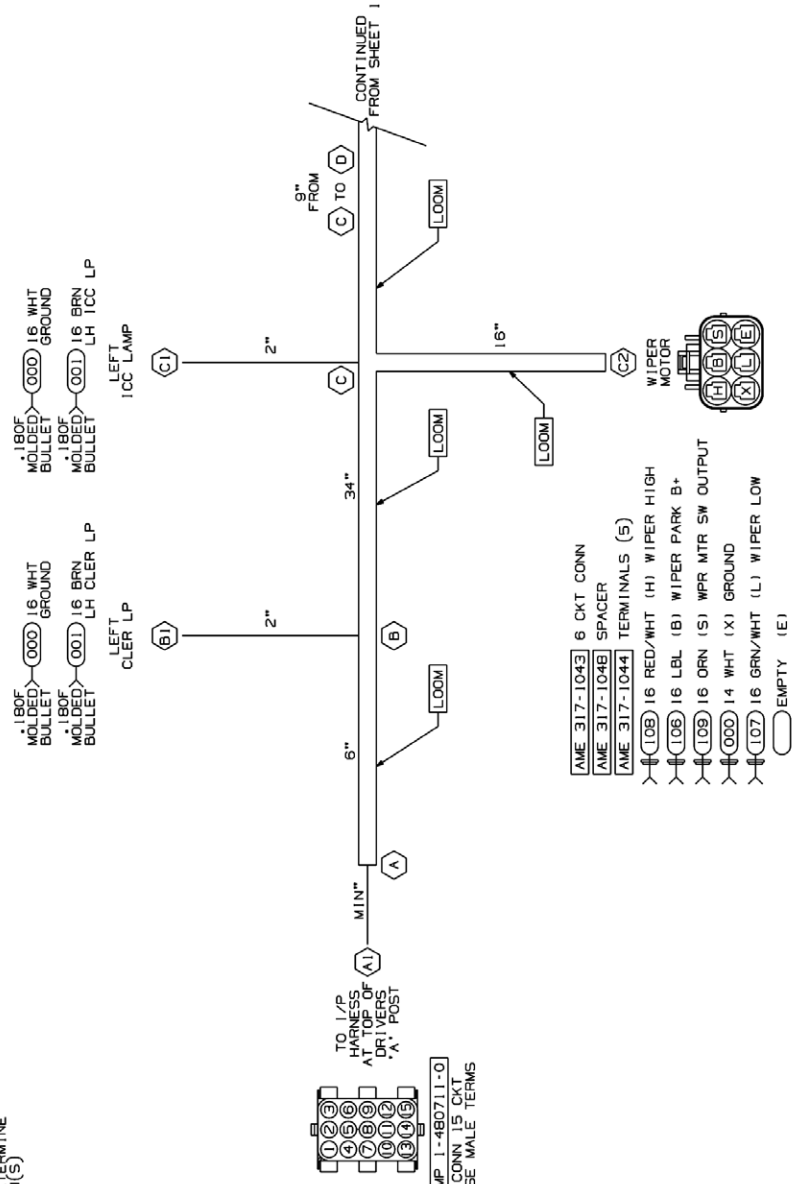
REV.	DESCRIPTION	DATE
007391210	A	2 OF 2
REV.	DESCRIPTION	DATE
A	RELEASE FOR PRODUCTION	
A	REDRAWN & REVISED	

CIRCUIT	GA/COLOR	END POINTS	FUNCTION
109	16 GRN	A1,C2	WIPER PK SWITCH OUTPUT
224	14 RED/GRN	A1,D2	BATTERY - SWITCHED
226	14 GRN/GRN	A1,D2	ACCESSORY - SWITCHED
304	16 YEL/BLK	A1,D3	DASH FAN LOW
305	16 GRN/BLK	A1,D3	DASH FAN HIGH
405	16 RED/YEL	A1,E2	AUXILIARY ACCESSORY

CIRCUIT	GA/COLOR	END POINTS	FUNCTION
000A	12 WHT	A1,D4,SPLICE 1	GROUND
000	14/16 WHT	B1,C1,C2,D1,D2,E1,E2,E3,SPLICE 1	GROUND
001	16 BRN	A1,B1,C1,D1,E1,E3	CLEARANCE/ICC LPS
004	16 PNK	A1,E2	BACK-UP SIGNAL
106	16 LBL	A1,C2	WIPER PARK SWITCH B+
107	16 GRN/WHT	A1,C2	WIPER LOW
108	16 RED/WHT	A1,C2	WIPER HIGH

**[SPLICE 1]**  
000A, 12 WHT IS TO BE  
SPLICED TO THE  
000A, 14 WHT CIRCUIT  
VENDOR TO DETERMINE  
LOCATION(S)

- ← 000A 12 WHT (1) GROUND
- ← 001 16 BRN (2) CLEARANCE/ICC LAMPS
- ← 004 16 PNK (3) BACK-UP SIGNAL
- ← 106 16 LBL (4) WIPER PARK SWITCH B+
- ← ( ) EMPTY (5)
- ← 107 16 GRN/WHT (6) WIPER LOW
- ← 108 16 RED/WHT (7) WIPER HIGH
- ← ( ) EMPTY (8)
- ← 109 16 GRN (9) WIPER PARK SW OUTPUT
- ← 224 14 RED/GRN (10) BATT (SW)
- ← ( ) EMPTY (11)
- ← 226 14 GRN/GRN (12) ACCY (SW)
- ← 304 16 YEL/BLK (13) FAN LOW
- ← 305 16 GRN/BLK (14) FAN HIGH
- ← 405 16 RED/YEL (15) ACCESSORY



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**MORGAN NOLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:  
1. UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN INCHES.  
2. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.  
3. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.  
4. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.  
5. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.

DATE: 07-1852  
TMC: TMC  
20DEC07  
20DEC07

DO NOT SCALE  
2008 SEED TRK

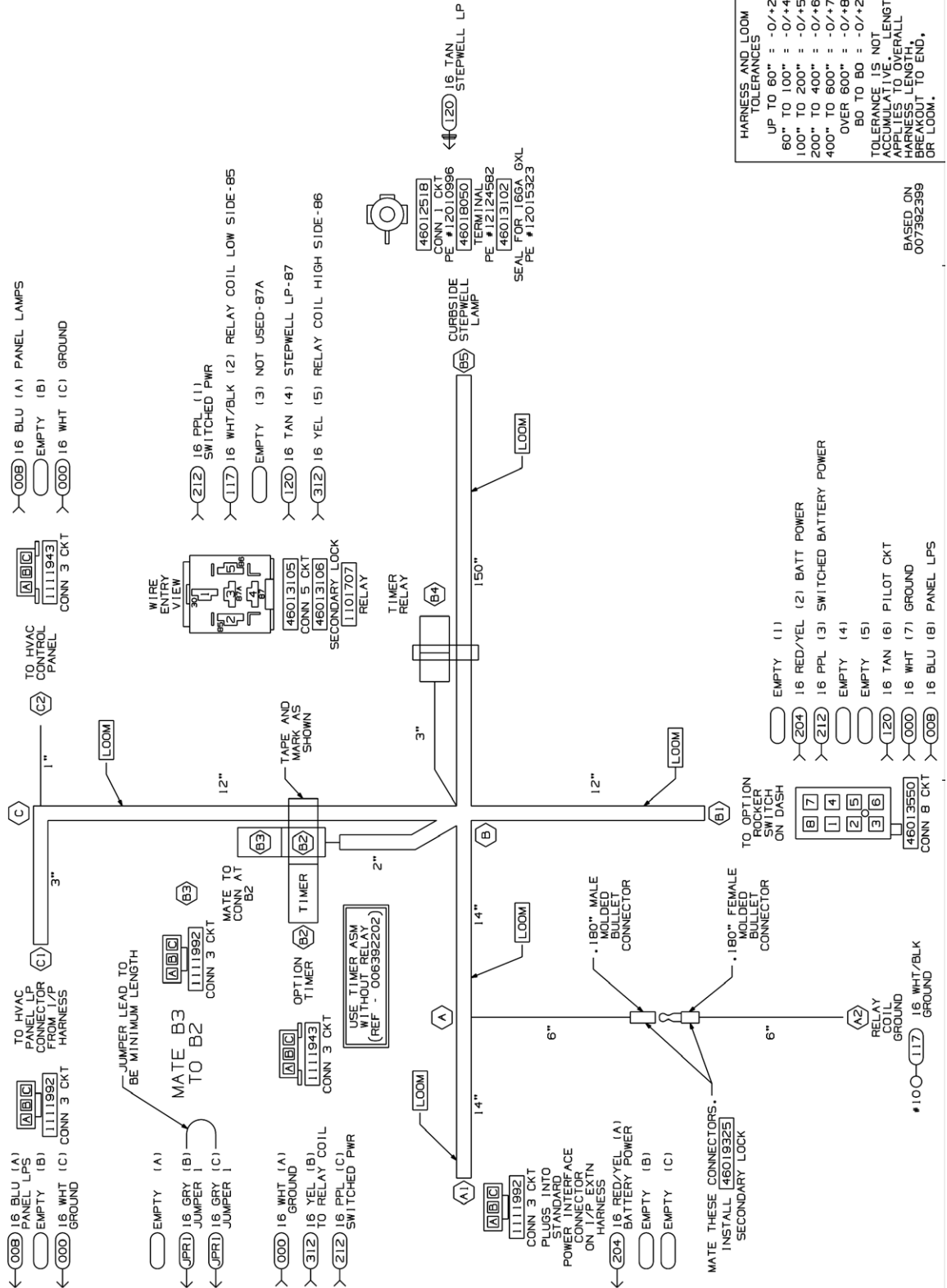
HARN ROOF NOSE  
2008 SEED TRUCK  
2P DYN PK WFR

DRAWING NO.: 007391210  
SCALE: NONE  
REV: A



REV	DESCRIPTION	DATE
007392398	RELEASE TO PRODUCTION	

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	B1, B2, C1, C2	GROUND
008	16 BLU	B1, C1, C2	PANEL LAMPS
117	16 WHT/BLK	B4, D2	RELAY COIL THRU DOOR SWITCH
120	16 TAN	B1, B4, B5	UNDER STEP LAMP / PILOT CKT
204	16 RED/YEL	A1, B1	BATTERY POWER
212	16 PPL	B1, B2, B4	SWITCHED BATTERY POWER
312	16 YEL	B2, B4	TIMER OUTPUT TO RELAY COIL
JPR1	16 GRY	B3, B3	JUMPER LEAD FOR NO TIMER



- 8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTIONS. INSTALLS SHOWN IN TERMINAL VIEW.
- 7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- 6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
- 5. SPLICES TO BE AUTOMATED WITH STRIKING SPRICES ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
- 4. TAPE (1111096): 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- 3. HARNESS TO HAVE A LABEL MARKED AS FOLLOWING PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- 2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- 1. GXL WIRE.

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<b>MORGAN OLSON</b> <small>GENERAL STANDARDS UNLESS OTHERWISE NOTED:          1. DIMENSIONS ARE IN DECIMAL INCHES UNLESS OTHERWISE NOTED.          2. DIMENSIONS IN PARENS ALL HOLE DIMENSIONS MAY BE DRIVEN.          3. DIMENSIONS IN SQUARE CORNERS MAY BE DRIVEN.          4. DIMENSIONS IN SQUARE CORNERS MAY BE DRIVEN.          5. DIMENSIONS IN SQUARE CORNERS MAY BE DRIVEN.          6. DIMENSIONS IN SQUARE CORNERS MAY BE DRIVEN.</small>		REV	DATE
		1	07JUL07
HARNESS AND LOOM TOLERANCES UP TO 60" = -0/+2" 60" TO 100" = -0/+4" 100" TO 200" = -0/+5" 200" TO 400" = -0/+6" 400" TO 600" = -0/+7" OVER 600" = -0/+8" TOLERANCE IS NOT ACCUMULATIVE. LENGTH APPLIES TO OVERALL HARNESS LENGTH, PRECUT TO END, OR LOOM.		SCALE	NONE
DRAWING NO. 007392398 SHEET NO. 1 OF 1		REV	

DRAWING NO.	REV	SHT
05M279200	C	1 of 1
DESCRIPTION	DATE	BY
RELEASE TO PRODUCTION		
A ADDED 000C	TMC 28.0000	
B 180°F BULBS IN A2	TMC 28.0000	
C WIRE BUTT CONNECTORS	TMC 28.0000	
D REDRAWN & REVISED	DFW 2008.1	
	DFW 2008.1	

- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [1111096] : 6" AT LOOM BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

**NOTES:**

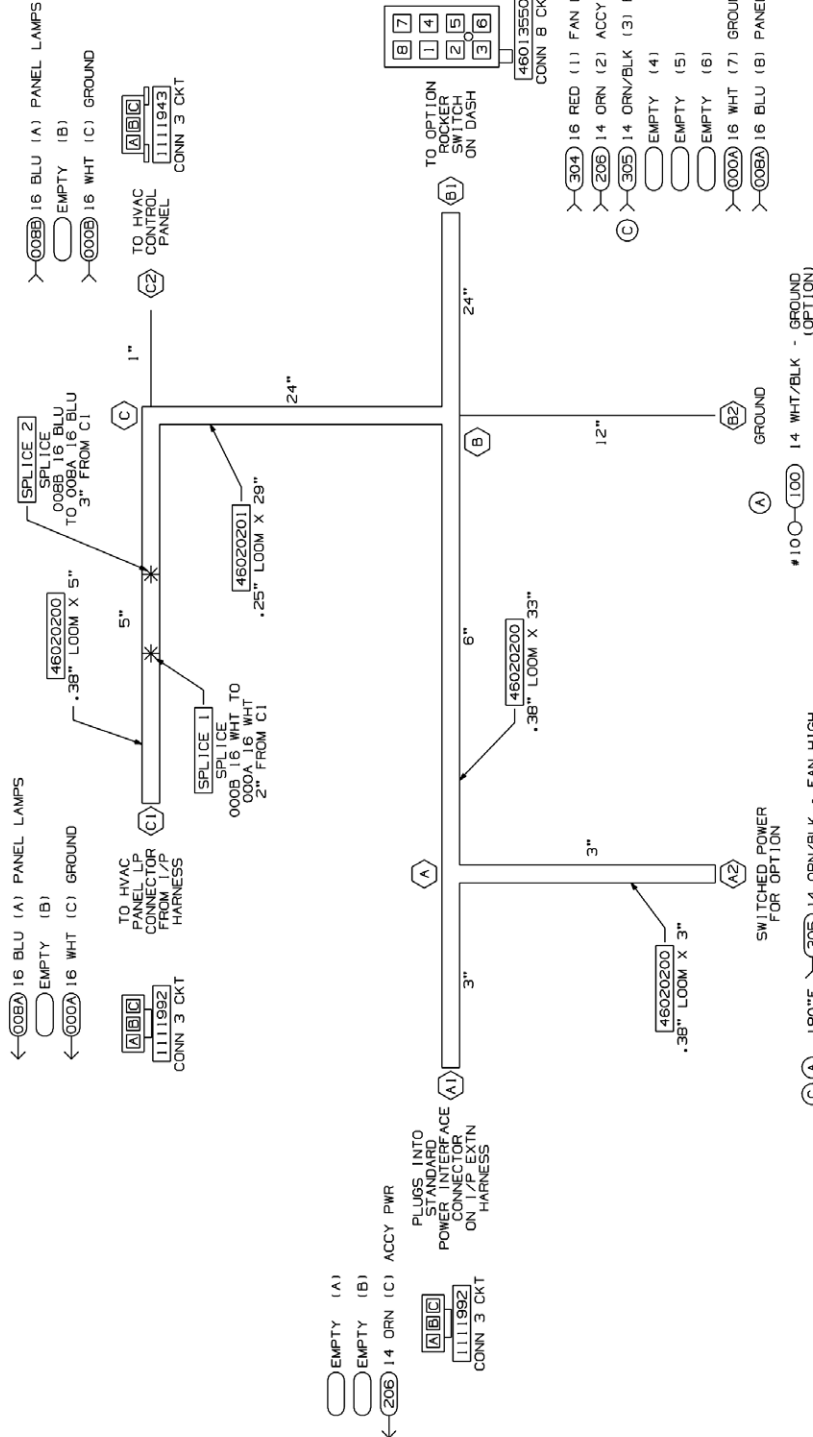
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GENERAL STANDARD SALES ENGINEERING NOTION	DATE	DATE
1. ANALYSIS, DESIGN, DRAWING, AND MANUFACTURE	21 JUL 05	21 JUL 05
2. RELEASE TO PRODUCTION	DATE	DATE
3. RELEASE TO PRODUCTION	21 JUL 05	21 JUL 05
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97. RELEASE TO PRODUCTION	21 JUL 05	21 JUL 05
98. RELEASE TO PRODUCTION	DATE	DATE
99. RELEASE TO PRODUCTION	21 JUL 05	21 JUL 05
100. RELEASE TO PRODUCTION	DATE	DATE

FIRST USE:  
 CAPITAL AREA  
 DISTRICT LIBRARY  
 RSF00298

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000A	16 WHIT 053 46018504 OE 46017505	C1,B1	GROUND
000B	16 WHIT 004 1111944 OE STR .25	C2,SPLICE 1	GROUND
000A	16 BLU 053 46018504 OE 46017505	C1,B1	PANEL LAMPS
000B	16 BLU 003 1111944 OE STR .25	C2,SPLICE 2	PANEL LAMPS
100	14 WHIT/BLK 021 46019309 OE 1111836	A2,B2	GROUND (OPTION)
206	14 ORN 033 46018504 OE 46017505	A1,B1	ACCESSORY POWER
304	16 RED 033 46019309 OE 46017505	A2,B1	FAN LOW
305	14 ORN/BLK 033 46019309 OE 46017505	A2,B1	FAN HIGH



**HARNESS AND LOOM TOLERANCES**

UP TO 60"	-0/+2"
60" TO 100"	-0/+4"
100" TO 200"	-0/+5"
200" TO 400"	-0/+6"
400" TO 800"	-0/+7"
OVER 800"	-0/+8"
BO TO BO	-0/+2"

**LENGTHS APPLY FROM CAPITAL AREA DISTRICT LIBRARY RSF00298**

DRAWING NO.	REV	SHT
090093202	A	1 OF 1
DESCRIPTION	DATE	BY
RELEASE FOR PRODUCTION		
A 80" WAS 84"	MRS. ADAMS	2/28/84

9. THIS IS A PURCHASED HARNESS. NO BULL OF MATERIAL EXISTS.
8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPLICABLE DIMENSIONS. CONNECTING PIGTAILS SHOWN IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH COLD LEAD AND CONCLUSIVE LINED HEAT SHRINK TUBING.
4. TAPE [1111096]: 6" AT BREAKOUTS 2" AT 18" INTERVALS FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

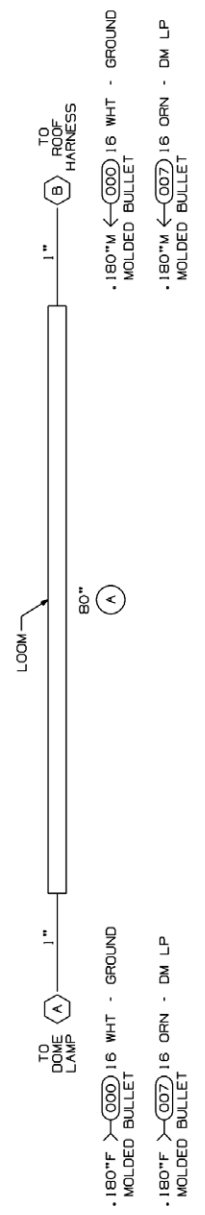
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GENERAL STANDARDS UNLESS OTHERWISE NOTED	
1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.	2. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
3. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.	4. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
5. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.	6. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
DATE	DATE
26OCT09	26OCT09
DFW	26816
DO NOT SCALE	
NAME	
HARN JPP CRG D/LP	
GEN .180BL11	
DRAWING NO.	SCALE
090093202	NONE
SHT	REV
1 OF 1	A

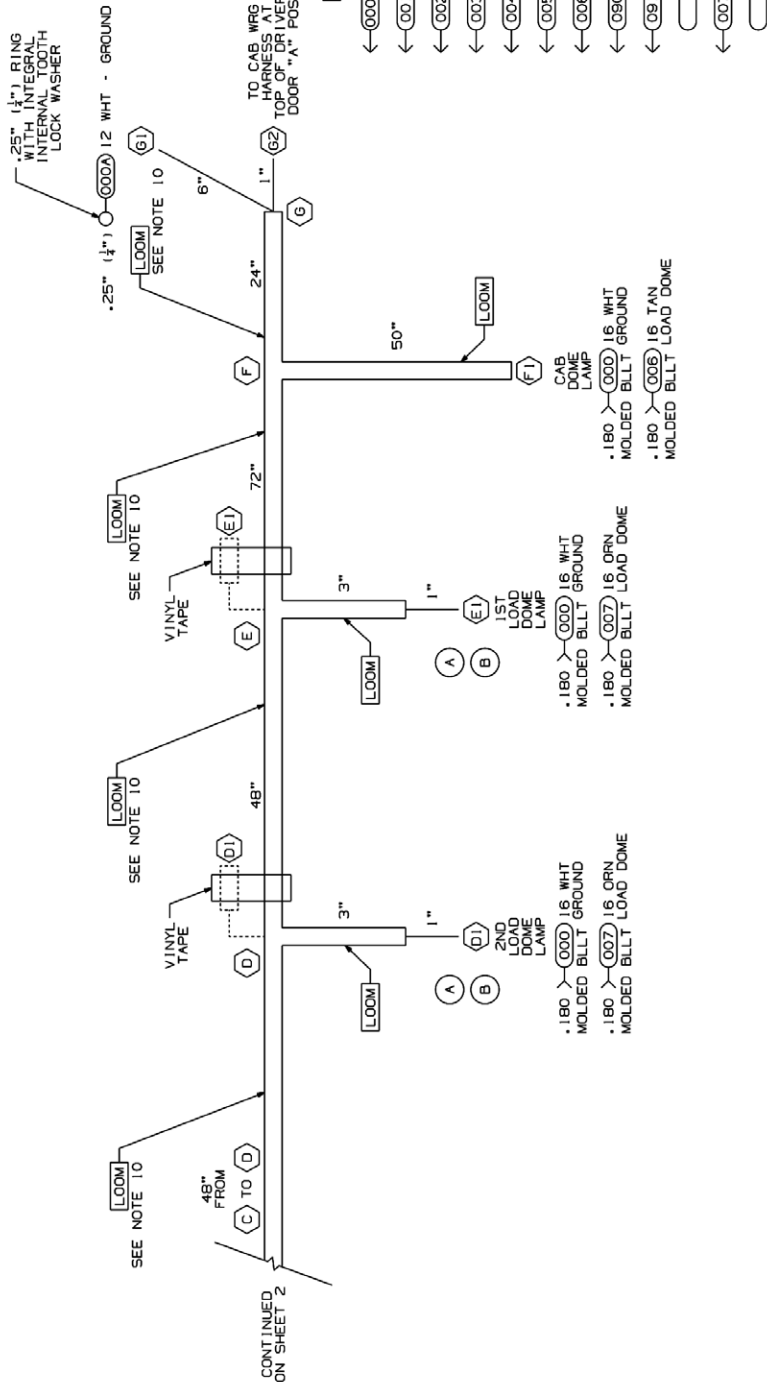
HARNESS AND LOOM TOLERANCES	
UP TO 60"	= -0/+2"
60" TO 100"	= -0/+4"
100" TO 200"	= -0/+5"
200" TO 400"	= -0/+6"
400" TO 600"	= -0/+7"
OVER 600"	= -0/+8"
BO TO BO	= -0/+2"
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.	



FEMALE BULLET TERMINALS TO BE GREASED

FIRST USE:  
 CV100632  
 BASED ON:  
 007386326

DRAWING NO.	REV.	SHT
093093203	B	1 of 2
DESCRIPTION		
REV. NO.	DATE	BY
RELEASE TO PRODUCTION		
A	27482	J.M.
REVISED DOME LAMP		
B	27482	J.M.
REV'D DM LP B/O'S		



10. MAIN TRUNK OF HARNESS MUST FIT IN A .75 DIA. WIRE CHANNEL
9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
8. VENDOR MAY REPLACE PLASTIC WITH WIRING APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTACT OPEN'S, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M-O FABRICATION IF NECESSARY.
4. TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

**NOTES:**

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<b>MORGAN OLSON</b>	
GENERAL STANDARD UNLESS OTHERWISE NOTED:	
1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.	2. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.
3. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.	4. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.
DATE	DATE
15APR09	21APR09
DATE	DATE
TJM	26B36
DO NOT SCALE	SCALE
HARNESS ROOF 21".24".6"	
M100 TRUCK .180F BLTT	
SHT	NONE
1 of 2	REV B

**HARNESS AND LOOM TOLERANCES**

UP TO 60"	-0/+2"
60" TO 100"	-0/+4"
100" TO 200"	-0/+5"
200" TO 400"	-0/+6"
400" TO 600"	-0/+7"
OVER 600"	-0/+8"

BO TO BO = -0/+2"  
 TOLERANCE IS NOT ACCUMULATIVE. LENGTH APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

DRAWING NO.	REV	SHT
093093203	B	2 OF 2
DESCRIPTION	DATE	BY
RELEASE TO PRODUCTION		
REVISED DOME LAMP	12/27/02	J.M.
BREAKOUT LENGTH	3/2/02	J.M.
REV'D DM LP B/O'S	02/07/02	J.M.

10. MAIN TRUNK OF HARNESS MUST FIT IN A .75 DIA. WIRE CHANNEL
11. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
12. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
13. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
14. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
15. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. ALL WIRE END BUTTS MUST BE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
16. TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
17. HARNESS TO HAVE A LABEL FROM MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
18. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
19. GXL WIRE.

**NOTES:**

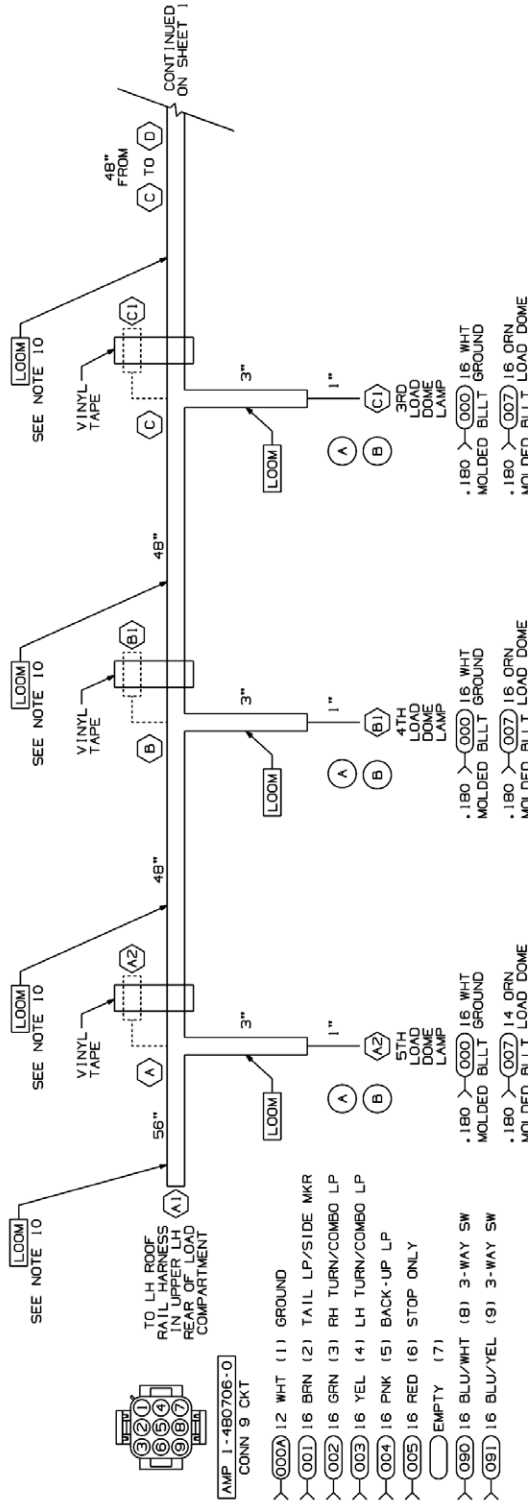
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DATE	DESIGNED BY	DATE	DESIGNED BY
12/27/02	J.M.	12/27/02	J.M.
DATE	DESIGNED BY	DATE	DESIGNED BY
3/2/02	J.M.	3/2/02	J.M.
DATE	DESIGNED BY	DATE	DESIGNED BY
02/07/02	J.M.	02/07/02	J.M.
DO NOT SCALE			
NAME			
HARNESS ROOF 21'-24'6"			
M100 TRUCK .180F BLLT			
SHT	DRAWING NO.	SCALE	REV
2 OF 2	093093203	NONE	B

**SPLICE 1**  
000A 12 WHIT IS TO BE SPLICED TO THE 000 WHIT CIRCUIT. VENDOR TO DETERMINE LOCATION(S)

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000A	12 WHIT	A1, B1, G2, SPLICE 1	GROUND
000	14/16 WHIT	A2, B1, C1, D1, E1, F1, SPLICE 1	GROUND
001	16 BRN	A1, G2	CLERK/ICC LPS
002	16 GRN	A1, G2	RH TURN LPS
003	16 YEL	A1, G2	LH TURN LPS
004	16 PNK	A1, G2	BACK-UP LPS
005	16 RED	A1, G2	STOP LPS
006	16 TAN	F1, G2	CAB DOME LP
007	14/16 ORN	A2, B1, C1, D1, E1, G2	LOAD DOME LAMPS
090	16 BLU/WHIT	A1, G2	3-WAY SWITCH - LOAD DMS
091	16 BLU/YEL	A1, G2	3-WAY SWITCH - LOAD DMS



**HARNESS AND LOOM TOLERANCES**

UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" OVER 600"	: -0/+7"
60" TO 80"	: -0/+8"
80" TO 100"	: -0/+2"

TOLERANCE IS NOT LENGTH ACCUMULATIVE. APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

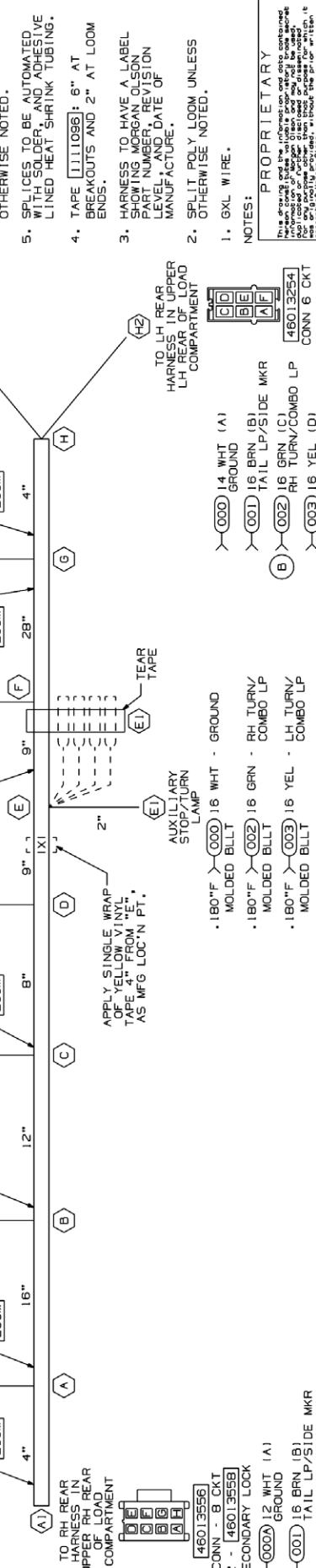
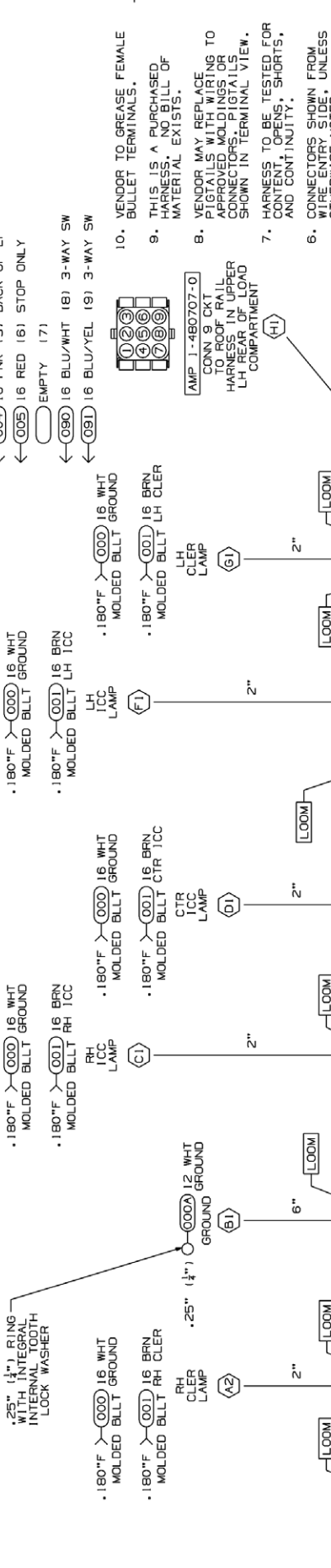


DRAWING NO.	REV.	DESCRIPTION	SHT
093093205	B	RELEASE TO PRODUCTION	1 of 1
		PREPARED BY	
		DESIGNED BY	
		CHECKED BY	
		DATE	

[SPLICE 1]  
000A 12 WHT IS TO BE  
LEFT UNTERMINATED  
ON THE WHT CIRCUIT.  
VENDOR TO DETERMINE  
LOCATION(S)

CIRCUIT DESCRIPTION	END POINTS	FUNCTION
000A 12 WHT	A1, B1, H1, SPLICE 1	GROUND
000 14/16 WHT	AZ, CI, DI, EI, F1, G1, H2, SPLICE 1	GROUND
001 16 BRN	A1, A2, CI, DI, F1, I, H1, H2	CLER/ICC/MARKER LAMPS
002 16 GRN	A1, EI, H1, H2	RH TURN/COMBO LP
003 16 YEL	A1, H1, H2	LH TURN/COMBO LP
004 16 PNK	A1, H1, H2	BACK-UP LAMPS
005 16 RED	A1, EI, H1, H2	STOP ONLY LAMPS
090 16 BLU/WHT	A1, H1	3-WAY SWITCH
091 16 BLU/YEL	A1, H1	3-WAY SWITCH

- ← 000A 12 WHT (1) GROUND
- ← 001 16 BRN (2) TAIL LP/SIDE MKR
- ← 002 16 GRN (3) RH TURN/COMBO LP
- ← 003 16 YEL (4) LH TURN/COMBO LP
- ← 004 16 PNK (5) BACK-UP LP
- ← 005 16 RED (6) STOP ONLY
- ← 090 16 BLU/WHT (8) 3-WAY SW
- ← 091 16 BLU/YEL (9) 3-WAY SW



DATE	06APR08	DATE	06APR08
TIME		TIME	
BY		BY	
CHECKED		CHECKED	
SCALE		SCALE	
NAME	HARNESSTRANSOM SEED TRUCK		
DRAWING NO.	CHMSL READY - 160F BLT		
SHT	1 of 1		
REV	093093205		

**MORGAN OLSON**

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**MORGAN OLSON**

STANDARD UNLESS OTHERWISE NOTED

1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.

2. FOR ALL MATTERING ALL PARTS EXPANS MUST BE

3. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

4. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.

DATE 06APR08 TIME 06:36

DO NOT SCALE

HARNESSTRANSOM SEED TRUCK

CHMSL READY - 160F BLT

DRAWING NO. 093093205

SHT 1 of 1

REV NONE

- NOTES:
- GXL WIRE.
  - SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
  - HARNES TO HAVE A LABEL WITH THE WIRING DIAGRAM, PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
  - TAPE [111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
  - SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT-SHRINK TUBING.
  - CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
  - HARNES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
  - VENDOR TO REPLACE BULLETT TERMINALS TO THIS IS A PURCHASED HARNES. NO BILL OF MATERIAL EXISTS.
  - VENDOR MAY REPLACE BULLETT TERMINALS TO THIS IS A PURCHASED HARNES. NO BILL OF MATERIAL EXISTS.
  - VENDOR TO REPLACE BULLETT TERMINALS TO THIS IS A PURCHASED HARNES. NO BILL OF MATERIAL EXISTS.
  - VENDOR TO REPLACE BULLETT TERMINALS TO THIS IS A PURCHASED HARNES. NO BILL OF MATERIAL EXISTS.

HARNES AND LOOM TOLERANCES

UP TO 60" : -0/+2"

60" TO 100" : -0/+4"

100" TO 200" : -0/+5"

200" TO 400" : -0/+6"

400" TO 600" : -0/+7"

OVER 600" : -0/+8"

BO TO BO : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

TO RH REAR HARNES IN UPPER RH REAR OF LOAD COMPARTMENT

[46013556] CONN - B CKT

2 - [46013558] SECONDARY LOCK

000A 12 WHT (A) GROUND

001 16 BRN (B) TAIL LP/SIDE MKR

002 16 GRN (C) RH TURN/COMBO LP

003 16 YEL (D) LH TURN/COMBO LP

004 16 PNK (E) BACK-UP LP

005 16 RED (F) STOP ONLY

090 16 BLU/WHT (G) 3-WAY SW

091 16 BLU/YEL (H) 3-WAY SW

TO LH REAR HARNES IN UPPER LH REAR OF LOAD COMPARTMENT

[46013254] CONN 6 CKT

000 14 WHT (A) GROUND

001 16 BRN (B) TAIL LP/SIDE MKR

002 16 GRN (C) RH TURN/COMBO LP

003 16 YEL (D) LH TURN/COMBO LP

004 16 PNK (E) BACK-UP LP

005 16 RED (F) STOP ONLY

APPLY SINGLE WRAP OF YELLOW VINYL TAPE 4" FROM "E", AS MFG LOC'N PT.

AUXILIARY STOP/TURN LAMP

000 16 WHT - GROUND

001 16 BRN - RH TURN/COMBO LP

002 16 GRN - LH TURN/COMBO LP

003 16 YEL - STOP ONLY

004 16 PNK - STOP ONLY

005 16 RED - STOP ONLY

TO RH REAR HARNES IN UPPER RH REAR OF LOAD COMPARTMENT

[46013556] CONN - B CKT

2 - [46013558] SECONDARY LOCK

000A 12 WHT (A) GROUND

001 16 BRN (B) TAIL LP/SIDE MKR

002 16 GRN (C) RH TURN/COMBO LP

003 16 YEL (D) LH TURN/COMBO LP

004 16 PNK (E) BACK-UP LP

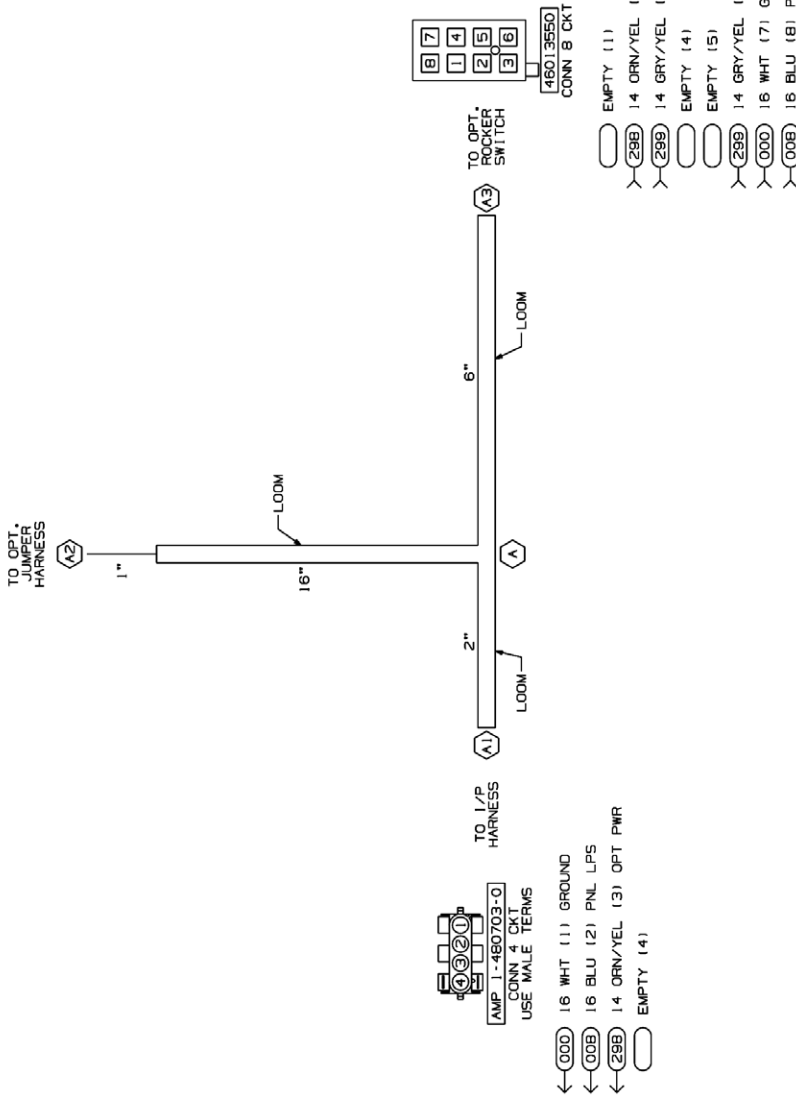
005 16 RED (F) STOP ONLY

090 16 BLU/WHT (G) 3-WAY SW

091 16 BLU/YEL (H) 3-WAY SW

DRAWING NO.	REV	SHT
102084201		1 of 1
DESCRIPTION	REV	REV DATE
RELEASE FOR PRODUCTION	CK	

1.180" F (299) 14 GR/YEL - OPT SW'D  
MOLDED BILL



- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE WITH PARTS TO APPROVED MOLDS OR CONNECTORS. PICTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR SHORTS, OPEN, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE. UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE (1111098): 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE

NOTES:

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REVISIONS (VALUES OTHERWISE NOTED)	DATE	BY
1. WIRE GAUGE & COLOR CHANGE	JAN 1 2010	JAN 1 2010
2. PNL LPS AND OPT SW'D		
3. PNL LPS AND OPT SW'D		
4. RELEASE FOR PRODUCTION		
DATE	DATE	DATE
05APR10	05APR10	05APR10
DFW	DFW	DFW
30633	30633	30633
DO NOT SCALE		
NAME		
HARN RKR SW_LPR FOR OPT		
BATT OR ACCY M-100 PMR ONLY		
DRAWING NO.	SCALE	
102084201		
SHT	REV	
1 of 1	NONE	

HARNESS AND LOOM TOLERANCES

- UP TO 60" : -0/+2"
- 60" TO 100" : -0/+4"
- 100" TO 200" : -0/+5"
- 200" TO 400" : -0/+8"
- 400" TO 600" : -0/+7"
- OVER 600" : -0/+8"
- BO TO BO : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

FIRST USE:  
CV100770  
JW000355  
0363401  
092084201

DRAWING NO.	REV	SHT
102092202		1 OF 1
DESCRIPTION	CHK.	ISSUE DATE
RELEASE FOR PRODUCTION		

9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
10. VENDOR MAY REPLACE WITH WIRE USING APPROVED MOLDINGS OR CONNECTORS. PICTAILS SHOWN IN TERMINAL VIEW.
11. HARNESS TO BE TESTED FOR CONTACT OVERS, SHORTS, AND CONTINUITY.
12. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
13. SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
14. TAPE [1111098]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED Loom LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
15. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
16. SPLIT NYLON LOOM, BLACK WITH GRAY STRIPE, UNLESS OTHERWISE NOTED.
17. GXL WIRE.

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**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED: .005 ± .010

1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.

2. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

3. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

4. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

DATE: 03APR10  
 DFW: 30575  
 DO NOT SCALE

HARN T L/G SOL CTRL

DRAWING NO. 102092202

SHT 1 OF 1

SCALE NONE

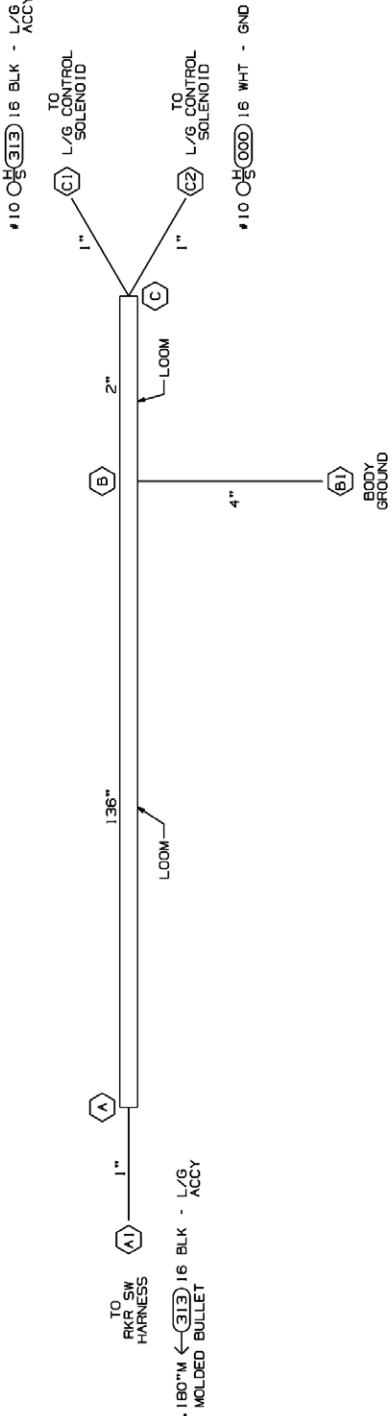
REV

**HARNESS AND LOOM TOLERANCES**

UP TO 60" : -0/+2"  
 60" TO 100" : -0/+4"  
 100" TO 200" : -0/+5"  
 200" TO 400" : -0/+6"  
 400" TO 600" : -0/+7"  
 OVER 600" : -0/+8"

BO TO BO : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.



REV	A	SHT	1 OF 3
DESCRIPTION		REV	
RELEASE FOR PRODUCTION		DATE	
11" UNLOADED WAS 2"		DESIGN	3/26/03
21" 6" WAS 4"		DATE	3/26/03
		REV	

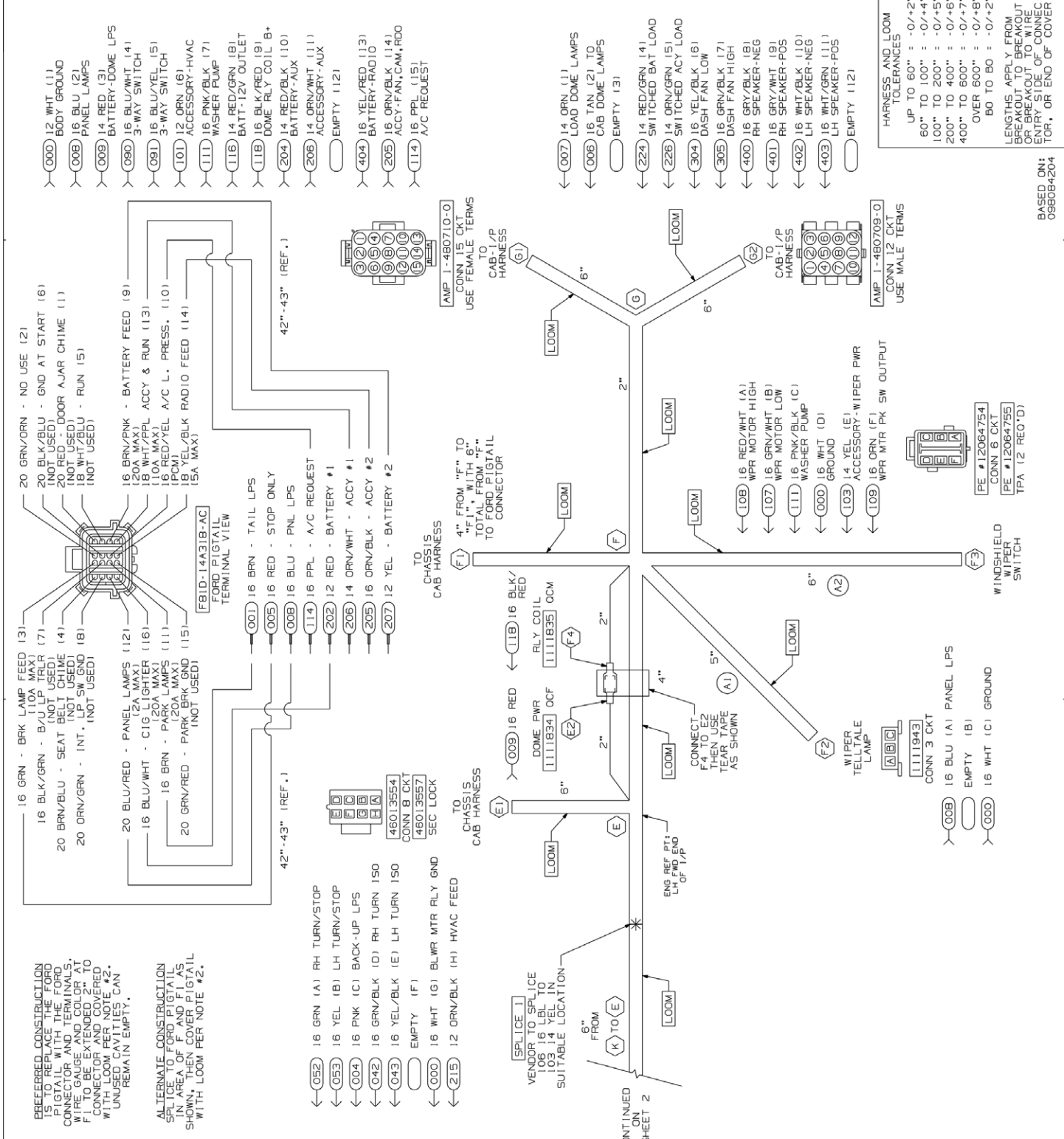
9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
8. VENDOR MAY REPLACE APPROX. MULTI-WIRE HARNESS WITH PIAGITALS CONNECTORS IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTINUITY, SHORTS, AND CONNECTORITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
4. TAPE [1111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS, FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND MANUFACTURE DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

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**MORGAN OLSON**

DATE	08NOV10	DATE	08NOV10
DFW		DFW	32990
DO NOT SCALE	2011 F-59 M-100	SCALE	NONE
HARN CWD CTR F59 2011		REV	A
DRAWING NO.	115084202		
SHT	1 OF 3		



**HARNESS AND LOOM TOLERANCES**

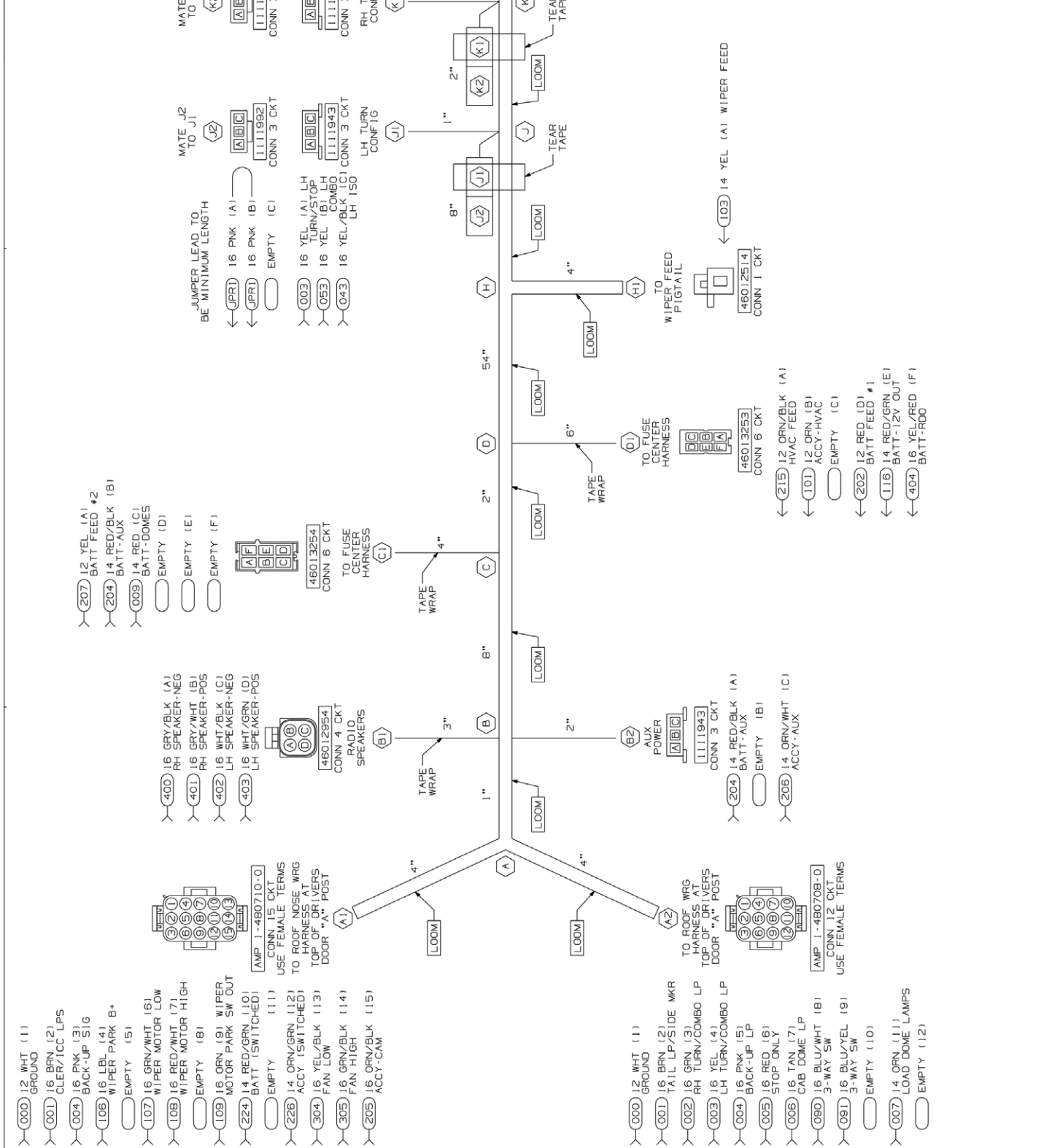
60" TO 100" : -0/+2"  
 100" TO 200" : -0/+4"  
 200" TO 400" : -0/+6"  
 400" TO 600" : -0/+7"  
 OVER 600" : -0/+8"  
 BO TO BO : -0/+2"

LENGTHS APPLY FROM WIPER BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

BASED ON: 088084204

REV.	DESCRIPTION	DATE
A	RELEASE FOR PRODUCTION	
A	1) 5" LOOMED WAS 2"	DEF. 3/2003
	2) 6" WAS 4"	

REV.	DESCRIPTION	DATE
A	RELEASE FOR PRODUCTION	
A	1) 5" LOOMED WAS 2"	DEF. 3/2003
	2) 6" WAS 4"	



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**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED

1. ANGLES: 1: 0.5 DEGREE

2. FOR ALL MATTERING ALL INSIDE CORNERS MUST BE ROUNDED

3. FOR ALL MATTERING ALL OUTSIDE CORNERS MUST BE ROUNDED

4. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

DATE: 06NOV10 DATE: 06NOV10

DO NOT SCALE: 2011 F-59 M-100

NAME: HARN CMD CTR F59 2011

DRAWING NO.: 115084202

SHT: 2 of 3

SCALE: NONE

REV: A



DRAWING NO. 115084202	REV A	SHT 3 of 3
DESCRIPTION RELEASE FOR PRODUCTION	BY CHK.	ECO NO. DATE
11 UNLOCKED WAS 2"	DFW	39883
21 6" WAS 4"	DFW	39883

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	12/16 WHT	A1,A2,E1,F2,F3,G1	GROUND
001	16 BRN	A1,A2,F1	TAIL/CLER/MRKR LAMPS
002	16 GRN	A2,K1	RIGHT HAND TURN/STOP LAMP
003	16 YEL	A2,J1	LEFT HAND TURN/STOP LAMP
004	16 PNK	A1,A2,E1	BACK-UP LP SIGNAL
005	16 RED	A2,F1	STOP ONLY LAMP
006	16 TAN	A2,G2	CAB DOME LAMP
007	14 ORN	A2,G2	LOAD DOME LAMP(S)
008	16 BLU	F1,F2,G1	DASH ILLUM
009	14/16 RED	C1,E2,G1	BATTERY-DOME LAMP
042	16 GRN/BLK	E1,K1	RH TURN ISO
043	16 YEL/BLK	E1,J1	LH TURN ISO
052	16 GRN	E1,K1	RH TURN/STOP
053	16 YEL	E1,J1	LH TURN/STOP
090	16 BLU/WHI	A2,G1	LOAD DM 3W SW
091	16 BLU/YEL	A2,G1	LOAD DM 3W SW
101	12 ORN	D1,G1	ACCESSORY-ELECTRIC HVAC POWER
103	14 YEL	H1,F3,SPLICE 1	ACCESSORY WIPER POWER
106	16 LBL	A1,SPLICE 1	WIPER PARK (B+)
107	16 GRN/WHI	A1,F3	WIPER MOTOR LOW
108	16 RED/WHI	A1,F3	WIPER MOTOR HIGH
109	16 ORN	A1,F3	WPR MOTOR PARK SWITCH OUTPUT
111	16 PNK/BLK	F3,G1	WASHER PUMP
114	16 PPL	F1,G1	A/C REQUEST
116	14 RED/GRN	D1,G1	BATTERY-12V OUTLET/LTR
118	16 BLK/RED	F4,G1	LOAD DOME RELAY COIL (B+)
202	12 RED	D1,F1	BATTERY FEED #1
204	14 RED/BLK	B2,C1,G1	BATTERY-AUXILIARY
205	16 ORN/BLK	A1,F1,G1	ACCESSORY-FAN,CAM,RDO
206	14 ORN/WHI	B2,F1,G1	ACCESSORY-AUXILIARY
207	12 YEL	C1,F1	BATTERY FEED #2
215	12 ORN/BLK	D1,E1	ACCESSORY-HVAC FEED
224	14 RED/GRN	A1,G2	BATTERY-AUXILIARY SWITCHED
226	14 ORN/GRN	A1,G2	ACCESSORY-AUXILIARY SWITCHED
304	16 YEL/BLK	A1,G2	DASH FAN LOW
305	16 GRN/BLK	A1,G2	DASH FAN HIGH
*400	16 GRY/BLK	B1,G2	RH SPEAKER (-)
*401	16 GRY/WHI	B1,G2	RH SPEAKER (+)
*402	16 WHT/BLK	B1,G2	LH SPEAKER (-)
*403	16 WHT/GRN	B1,G2	LH SPEAKER (+)
404	16 YEL/RED	D1,G1	BATTERY-RADIO
JPR1	16 PNK	J2,J2	LH TURN JUMPER
JPR2	16 BLK	K2,K2	RH TURN JUMPER

- OPTIONAL: CIRCUITS 400 & 401 MAY BE SUPPLIED AS STANDARD SPEAKER "ZIP CORD" PAIRS. CIRCUIT NUMBER AND CONNECTOR INDEXING MUST BE MAINTAINED AS SHOWN.
- OPTIONAL: CIRCUITS 402 & 403 MAY BE SUPPLIED AS STANDARD SPEAKER "ZIP CORD" PAIRS. CIRCUIT NUMBER AND CONNECTOR INDEXING MUST BE MAINTAINED AS SHOWN.

**PROPRIETARY**

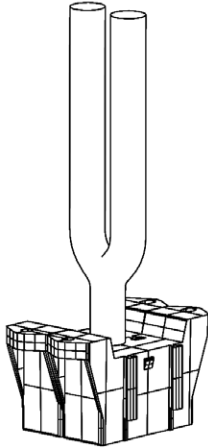
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**MORGAN OLSON**

GENERAL CHANGES MAKE OTHERS NOTED  
 1. TOLERANCE . XX ± .000 .XXX ± .010  
 2. ANGLES . XX ± 0.5 DEGREES .XXX ± .005  
 3. FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE ROUNDED TO .031" RADIUS  
 4. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MUST BE ROUNDED UP TO .031" RADIUS  
 DRAWN BY: [ ] CHECKED BY: [ ] ECO NO.: 32990  
 DATE: 06NOV10 DATE: 06NOV10  
 DO NOT SCALE: 2011 F-59 M-100  
 NAME: HARN CMD CTR F59 2011  
 SCALE: NONE  
 SHT: 3 of 3 DRAWING NO.: 115084202  
 REV: A

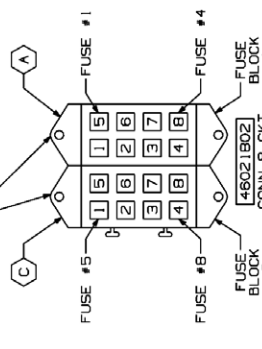
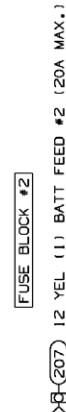
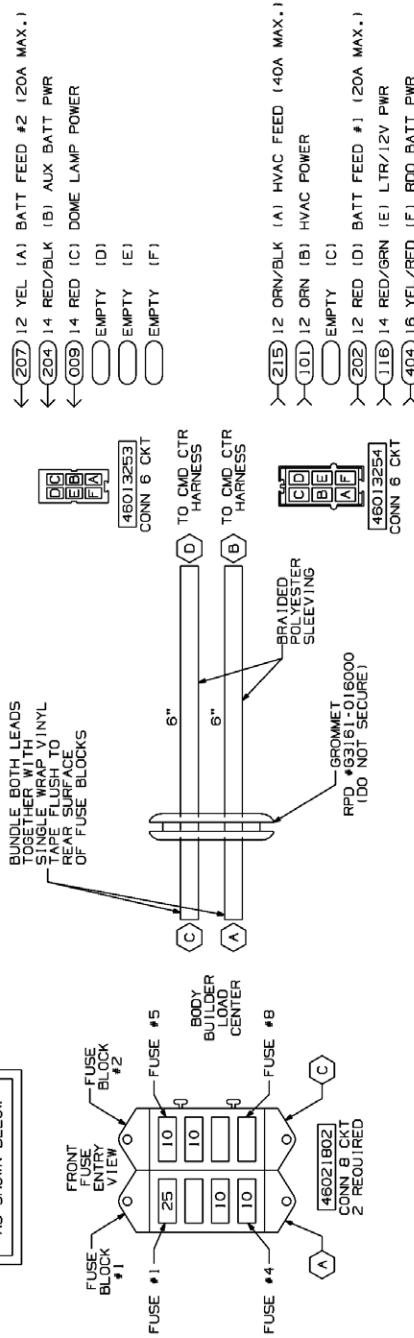
DRAWING NO.	REV	SHT
115084203		1 OF 1
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
009	14 RED	C,D	DOME LAMP POWER
101	12 ORN	A,B	HVAC POWER
116	14 RED/GRN	A,B	LTR/12V POWER
202	12 RED	A,B	BATT FEED #1
204	14 RED/BLK	C,D	AUX BATT POWER
207	12 YEL	C,D	BATT FEED #2
215	12 ORN/BLK	A,B	HVAC FEED
404	16 YEL/RED	A,B	RADIO BATT POWER



LAY OF WIRE TO BE SUCH THAT WIRING EXTENDS STRAIGHT OUT FROM REAR OF CENTER FUSE BLOCK ASSEMBLY, AS SHOWN

NOTE: FUSES AND FUSEBLOCKS MUST BE ORIENTED AS SHOWN BELOW



BASED ON: 095084202

HARNESS AND LOOM TOLERANCES

UP TO 60" : -0/+2"  
 60" TO 100" : -0/+4"  
 100" TO 200" : -0/+5"  
 200" TO 400" : -0/+6"  
 400" TO 600" : -0/+7"  
 OVER 600" : -0/+8"  
 80 TO 90 : -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, ENTRY POINT OF CONDUCTOR, OR END OF COVER.

NOTES:

- GXL WIRE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- TAPE [111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- CONNECTORS SHOWN FROM MOUNTING VIEW, UNLESS OTHERWISE NOTED.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- BRAIDED POLYESTER SLEEVING TO BE CLOSED AT BOTH ENDS WITH 1-1/2" OF SHRINK TUBING, AND TAPED [111098] 6" AT BREAKOUTS.
- THIS IS A PURCHASED MATERIAL. NO CELL OF MATERIAL EXISTS.

PROPRIETARY

**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED:

1. TOLERANCE : ± 0.000     JOG : .000     JOG X : .010  
 2. BREAK ALL DIMENSIONS UNLESS OTHERWISE NOTED  
 3. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED  
 4. DIMENSIONS UP TO .125" TO .1875" TO USE .125" TOLERANCE  
 5. DIMENSIONS UP TO .1875" TO .250" TO USE .1875" TOLERANCE  
 6. DIMENSIONS UP TO .250" TO .375" TO USE .250" TOLERANCE  
 7. DIMENSIONS UP TO .375" TO .500" TO USE .375" TOLERANCE  
 8. DIMENSIONS UP TO .500" TO .750" TO USE .500" TOLERANCE  
 9. DIMENSIONS UP TO .750" TO 1.000" TO USE .750" TOLERANCE  
 10. DIMENSIONS UP TO 1.000" TO 1.250" TO USE 1.000" TOLERANCE  
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 SHT 1 OF 1  
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REV.	DESCRIPTION	REV.	DATE
1	RELEASE FOR PRODUCTION		

DRAWING NO.	REV.	SHT
115085202		1 OF 1

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	14/16 WHT	A1, B1, D1, D2, E1, F1, F2, G	GROUND
001	16 BRN	A1, B1, D1, E1, F1	PARK/MARKER
002	16 GRN	A1, A2, E1, F1	RH TURN
003	16 YEL	A1, A2, B1, D1	LH TURN
010	16 TAN	A1, D2	LH LOW BEAM
011	14/16 RED	A1, D2, F2	HIGH BEAMS (BOTH)
012	16 PNK	A1, F2	RH LOW BEAM

000	16 WHT (1) GROUND
001	16 BRN (2) PARK
002	16 GRN (3) RH TURN
003	16 YEL (3) LH TURN
023	AMP 282087-1 CONN 3 CKT RH PARK/TURN

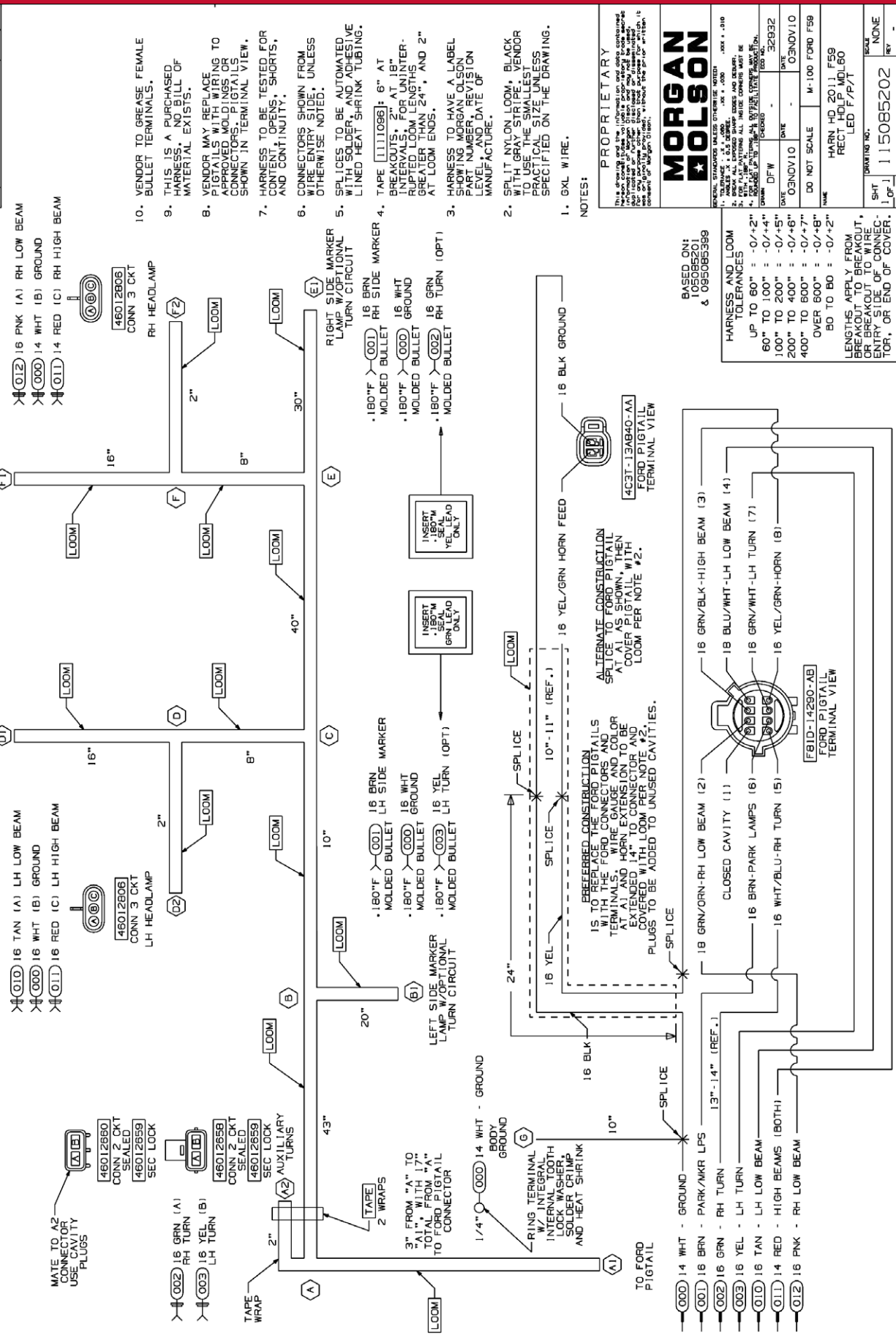
000	16 TAN (A) LH LOW BEAM
000	16 WHT (B) GROUND
011	16 RED (C) LH HIGH BEAM
023	AMP 282087-1 CONN 3 CKT LH PARK/TURN

000	16 PNK (A) RH LOW BEAM
000	16 WHT (B) GROUND
011	16 RED (C) RH HIGH BEAM

46012860	CONN 2 CKT SEALED
46012859	CONN 3 CKT SEC LOCK
46012858	CONN 2 CKT SEC LOCK
46012857	CONN 2 CKT SEC LOCK

002	16 GRN (A) RH TURN
003	16 YEL (B) LH TURN

000	14 WHT - GROUND
001	16 BRN - PARK/MKR LPS
002	16 GRN - RH TURN
003	16 YEL - LH TURN
010	16 TAN - LH LOW BEAM
011	14 RED - HIGH BEAMS (BOTH)
012	16 PNK - RH LOW BEAM



- VENDOR TO GREASE FEMALE BULLET TERMINALS.
- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY STUDS UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [111086] 6" AT BREAKOUTS, 2" AT 18" INTERVALS, FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT NYLON LOOM, BLACK WITH GRAY STRIPE. VENDOR TO USE THE SMALLEST PRACTICAL SIZE UNLESS SPECIFIED ON THE DRAWING.
- GXL WIRE.

NOTES:

PROPRIETARY

PLEASE DO NOT REPRODUCE OR TRANSMIT THIS INFORMATION IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF MORGAN OLSON. THIS INFORMATION IS UNCLASSIFIED AND IS NOT TO BE RELEASED TO THE PUBLIC.

**MORGAN OLSON**

GENERAL STANDARD UNLESS OTHERWISE NOTED

1. WIRE GAUGE: 16 AWG (18 GA) UNLESS OTHERWISE NOTED

2. WIRE COLOR: ALL WIRE COLOR CODES MUST BE AS SHOWN, WITH EXCEPT AS NOTED

3. WIRE IDENTIFICATION: ALL WIRE IDENTIFICATION MUST BE AS SHOWN, WITH EXCEPT AS NOTED

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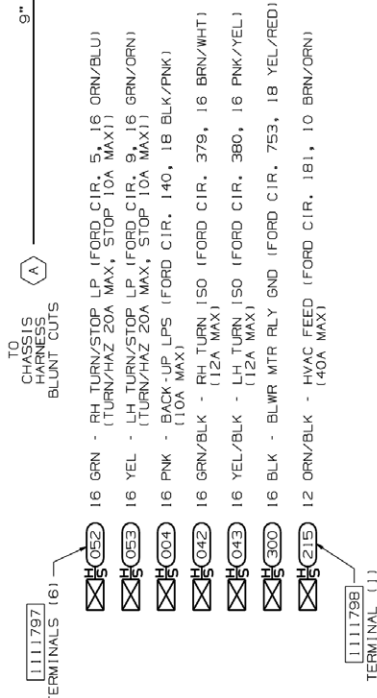
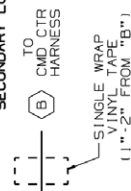
BASED ON:	105085201 & 095085399
HARNESS AND LOOM TOLERANCES	UP TO 80" = -0/+2" 60" TO 100" = -0/+4" 100" TO 200" = -0/+5" 200" TO 400" = -0/+8" 400" TO 800" = -0/+7" OVER 800" = -0/+7" BO TO BO = -0/+2"
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.	

REV.	REV.	SHT	Of	L
115088201				
DESCRIPTION				
RELEASE FOR PRODUCTION				

- 052 16 GRN (A) RH TURN/STOP LP
- 053 16 YEL (B) LH TURN/STOP LP
- 004 16 PNK (C) BACK-UP LPS
- 042 16 GRN/BLK (D) RH TURN ISO
- 043 16 YEL/BLK (E) LH TURN ISO
- EMPTY (F)
- 300 16 BLK (G) BLWR MTR RLY GND
- 215 12 ORN/BLK (H) HVAC FEED



46013556  
CONN - B CKT  
2 - 46013559  
SECONDARY LOCK



- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENT OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM THE VIEW STATED, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

**NOTES:**

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GENERAL STANDARD UNLESS OTHERWISE NOTED	
1. TOLERANCE: ± .000	2. BREAK ALL DIMENSIONS UNLESS OTHERWISE NOTED
3. FITS: ALL DIMENSIONS ARE TO BE TAKEN FROM THE UNMOUNTED PART	4. ALL DIMENSIONS ARE TO BE TAKEN FROM THE UNMOUNTED PART
DATE DFW	DATE 06NOV10
REV. 06NOV10	DATE 06NOV10
DO NOT SCALE	NAME
HARN JPR 1/P BLNT CUT	
DESIGNING NO.	SCALE NONE
SHT 115088201	REV.

HARNES AND LOOM TOLERANCES	
UP TO 60"	± 0/+2"
60" TO 100"	± 0/+4"
100" TO 200"	± 0/+5"
200" TO 400"	± 0/+6"
400" TO 600"	± 0/+7"
OVER 600"	± 0/+8"
BO TO BO	± 0/+2"
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, UNLESS OTHERWISE SPECIFIED. DIMENSIONS TO WIRE CENTER, OR END OF COVER.	

BASED ON: 095088397

DRAWING NO.		REV	DATE
115088202		A	10/11
REV.	DESCRIPTION	BY	DATE
	RELEASE FOR PRODUCTION		
A	3" WIRES ADDED TO DDM WAS BLANK	ALL	11/11

9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
10. VENDOR MAY REPLACE WITH APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
11. HARNESS TO BE TESTED FOR CONTACTS, SHORTS, AND CONTINUITY.
12. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
13. SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
14. TAPE (1111098): 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LOM. LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
15. HARNESS TO HAVE A LABEL PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
16. SPLIT NYLON LOOM, BLACK GRAY WITH GREEN, UNLESS OTHERWISE NOTED.
17. GXL WIRE.

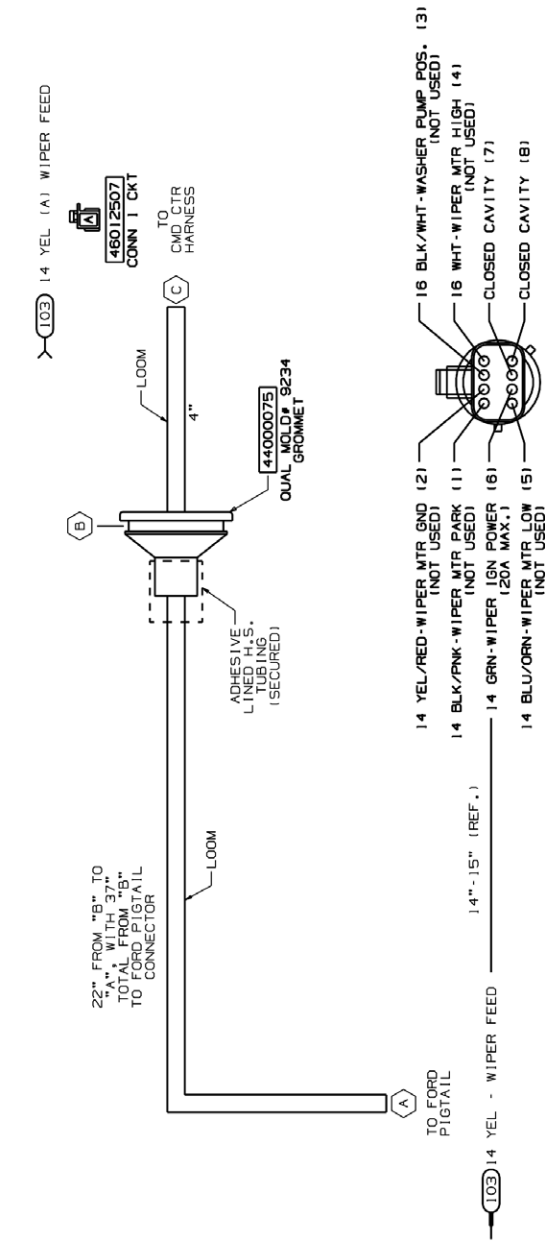
**NOTES:**

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<b>MORGAN OLSON</b>	
GENERAL DIMENSIONS UNLESS OTHERWISE SPECIFIED	
TOLERANCES	±.0005 ±.001 ±.002 ±.005 ±.010
ANGLES	ALL ANGLES SHOWN UNLESS OTHERWISE SPECIFIED
FINISH	ALL SURFACES UNLESS OTHERWISE SPECIFIED
UNIT	INCHES UNLESS OTHERWISE SPECIFIED
SCALE	AS SHOWN UNLESS OTHERWISE SPECIFIED
DATE	04NOV10
BY	04NOV10
DO NOT SCALE	
HARN JFR 1/P WPR F59 2011	
SHIT	115088202
LOF	NONE
REV	A

HARN AND LOOM TOLERANCES	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 800"	: -0/+7"
OVER 800"	: -0/+8"
BO TO BO	: -0/+2"
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT. IN BETWEEN OF CONDUCTOR OR END OF COVER.	



**ADDED NOTE:**

INSTALL 3" OF INSULATED WIRE W/ 5 TERMINALS INTO UNUSED CAVITIES OF HARNESS OR HEAT SHRINK ENDS OF BLUNT CUT WIRES. MAKE SURE WIRES ARE BUNDLED AND LOOMED WITH THE YELLOW WIPER FEED WIRE.

**PREFERRED CONSTRUCTION**

15 TO REPLACE THE FORD PIGTAIL WITH THE FORD CONNECTOR AND TERMINAL TO BE EXPOSED AND COLOR CONNECTOR AND COVERED WITH LOOM PER NOTE #2. PLUGS TO BE ADDED TO UNUSED CAVITIES.

**ALTERNATE CONSTRUCTION**

SPLICE TO FORD PIGTAIL AT A AS SHOWN, THEN COVER PIGTAIL WITH LOOM PER NOTE #2.

BASED ON:  
095066399

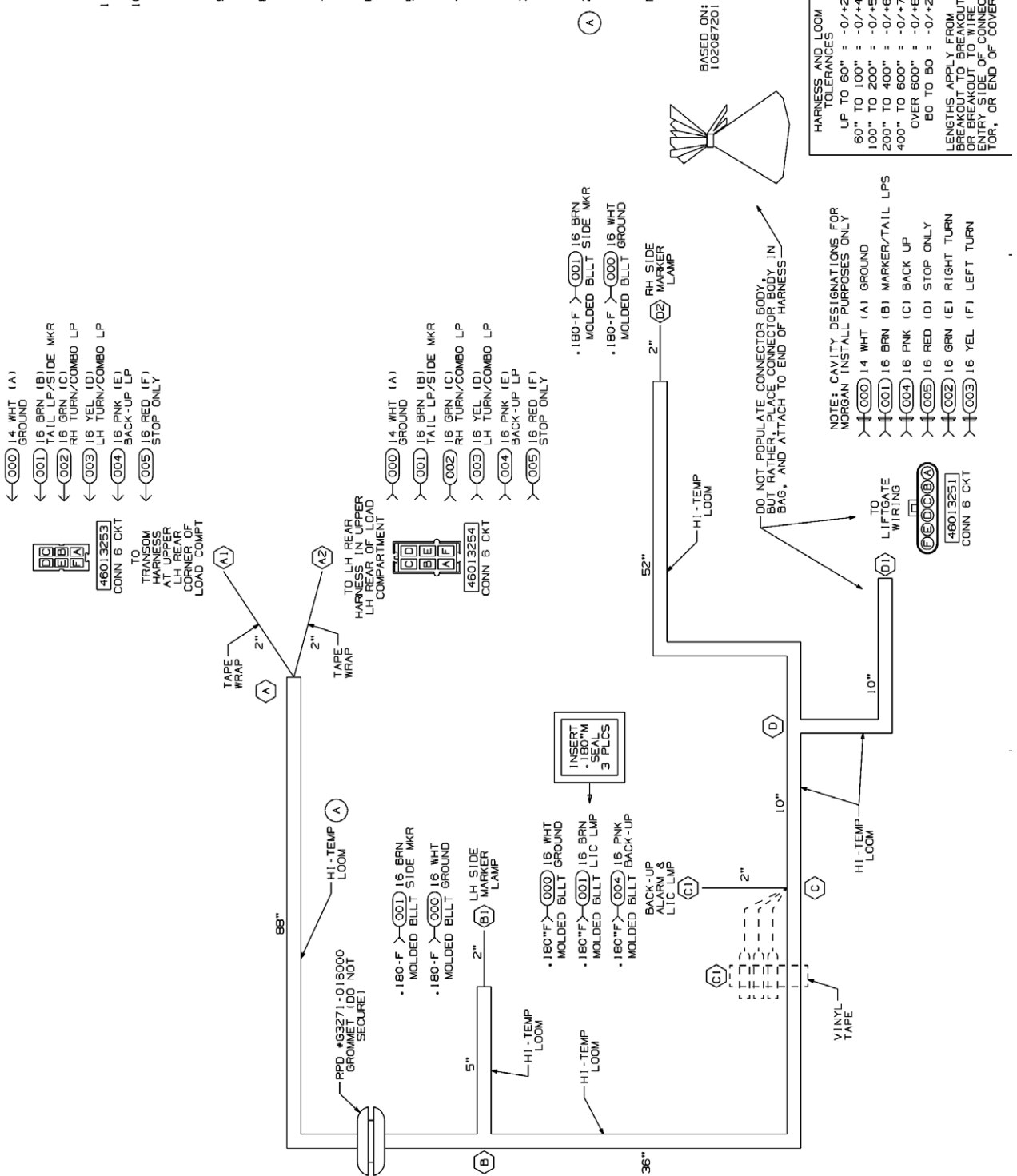


DRAWING NO.	REV	SHT
132087204	A	1 OF 1
REV.	DESCRIPTION	DATE
A	RELEASE FOR PRODUCTION	
	ALL LDM NOW HI TEMP	MTS 4/25/08
		SCALE

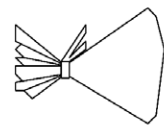
11. VENDOR TO GREASE FEMALE BULLET TERMINALS.
10. WHEN ISOLATED STOP CIRCUIT 005 IS USED, CIRCUITS 002 AND 003 CAN BE MAINS AND 004 CAN BE MAINS CAN BECOME TURN ONLY BY UNPLUGGING THE BRAKE FEED INTO TURN SIGNAL SWITCH.
9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO UNPLUGGED PIGTAILS CONNECTORS PIGTAILS SHOWN IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
4. TAPE [1111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
2. SPLIT NYLON LOOM, BLACK WITH GRAY STRIPE (HI-TEMP), UNLESS OTHERWISE NOTED.
1. GXL WIRE.

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<b>MORGAN OLSON</b>	
GENERAL STANDARD UNLESS OTHERWISE NOTED:	
1. WIRE GAUGE: 16 AWG	2. WIRE COLOR: 16 WHT
3. WIRE TYPE: 16 BRN	4. WIRE TYPE: 16 GRN
5. WIRE TYPE: 16 YEL	6. WIRE TYPE: 16 PNK
7. WIRE TYPE: 16 RED	8. WIRE TYPE: 16 GND
9. WIRE TYPE: 16 WHT	10. WIRE TYPE: 16 GND
DATE	42347
DATE	26NOV13
DO NOT SCALE	
NAME	
HARN-LIFTGATE	
TRANSON TO LIFTGATE	
DRAWING NO.	SCALE
132087204	NONE
REV	A

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	14/16 WHT	A1,A2,B1,C1,D1,D2	GROUND
001	16 BRN	A1,A2,B1,C1,D1,D2	MARKER/TAIL LPS
002	16 GRN	A1,A2,D1	RH TURN LP
003	16 YEL	A1,A2,D1	LH TURN LP
004	16 PNK	A1,A2,C1,D1	BACK-UP LPS
005	16 RED	A1,A2,D1	STOP LPS



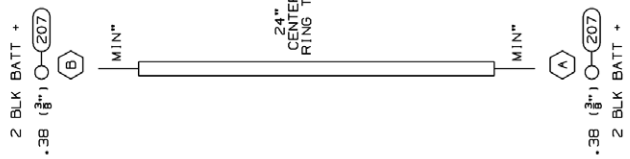
BASED ON: 102087201



<b>HARNESS AND LOOM TOLERANCES</b>	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
OVER 600"	: -0/+8"
BO TO BO	: -0/+2"
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.	

DRAWING NO.	REV	SHT
132088201	REL	1 of 1
DESCRIPTION	DATE	DATE
RELEASE FOR PRODUCTION		

CIRCUIT	GA/COLOR	END POINTS	FUNCTION
207	2 BLK	A, B	BATT +



8. VENDOR MAY REPLACE APPLICABLE WIRING TO CONNECTORS, PIGTAILS, SHOWN IN TERMINAL VIEW.
7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
4. TAPE [1111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS, FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND DATE OF MANUFACTURE.
2. SPLIT HI-TEMP POLY LOOM UNLESS OTHERWISE NOTED.
1. SGX WIRE.

NOTES:

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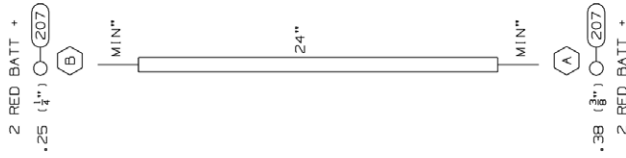


GENERAL STANDARDS UNLESS OTHERWISE NOTED	
1. ANGLES: 1/2" RADIUS	2. DIMENSIONS: UNLESS OTHERWISE NOTED
3. DIMENSIONS: UNLESS OTHERWISE NOTED	4. DIMENSIONS: UNLESS OTHERWISE NOTED
5. DIMENSIONS: UNLESS OTHERWISE NOTED	6. DIMENSIONS: UNLESS OTHERWISE NOTED
DATE	DATE
1 INOV13	1 INOV13
DO NOT SCALE	DO NOT SCALE
HARN BAT NEG 20A 24"	
SCALE	
SHEET	
1 OF 1	
DRAWING NO.	
132088201	
SCALE	
NONE	
REV	
REL	

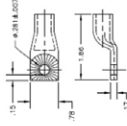
HARNESS AND LOOM TOLERANCES
UP TO 60" = -0/+2"
60" TO 100" = -0/+4"
100" TO 200" = -0/+5"
200" TO 400" = -0/+6"
400" TO 600" = -0/+7"
OVER 600" = -0/+8"
BO TO BO = -0/+2"
LENGTHS APPLY FROM BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

DRAWING NO.		REV.	SHT	
132088206		REL	1 of 1	
REV.	DESCRIPTION	CHK.	BY	DATE
	RELEASE FOR PRODUCTION			

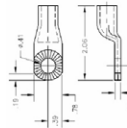
CIRCUIT	GA./COLOR	END POINTS	FUNCTION
207	2 RED	A, B	BATT +



1/4" LUG DETAILS



3/8" LUG DETAILS



USE SOLDER AND  
ADD HEAT SHRINK  
OVER CRIMPED LUGS

- 8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- 7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- 6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
- 5. SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
- 4. TAPE [ ]: 6" AT BREAKOUTS, FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- 3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- 2. SPLIT HI-TEMP POLY LOOM UNLESS OTHERWISE NOTED.
- 1. SGX WIRE.

NOTES:

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GENERAL STANDARDS UNLESS OTHERWISE NOTED	
1. ANGLES: A: 0.8 DEGREE B: 0.4 DEGREE C: 0.2 DEGREE	2. RADIUS: 0.002
3. DIMENSIONS: UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES	4. FOR ALL PARTS ALL FUTURE COMMENTS MUST BE APPROVED BY THE ORIGINAL ENGINEER
DRAWN	CHECKED
DATE	DATE
1/7OCT13	1/7OCT13
DO NOT SCALE	
NAME	DATE
HARN BATT POS 2GA BREAKER 24"	
DRAWING NO.	SCALE
132088206	NONE
SHT	REV
1 of 1	REL

HARNESS AND LOOM TOLERANCES	
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
OVER 600"	: -0/+8"
BO TO BO	: -0/+2"

LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

DRAWING NO.		REV	SHT
152088200		REL	1 OF 1
REV.	DESCRIPTION	BY	DATE
	RELEASE TO PRODUCTION		

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	A1, B1	GROUND

- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESSES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR M-O FABRICATION IF NECESSARY.
- TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESSES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- 6XL WIRE.

**NOTES:**

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GENERAL STANDARDS UNLESS OTHERWISE NOTED:

1. TOLERANCE: ±.0150mm ±.0006" ±.0005" ±.0007" ±.0100" ±.0120"

2. BREAK ALL EXPOSED SHARP EDGES AND CORNERS.

3. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.

4. ALL DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.

DATE	4/19/86
DATE	25/MAR/15
DATE	DO NOT SCALE

HARN JPR BAT SEP	
GROUND	
SCALE	
NONE	
SHT	152088200
1 OF 1	REL

HARNESSES AND LOOM TOLERANCES:

UP TO 60" = -0/+2"

60" TO 100" = -0/+4"

100" TO 200" = -0/+5"

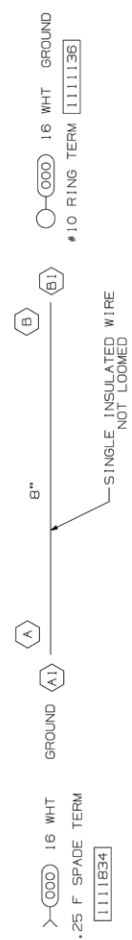
200" TO 400" = -0/+6"

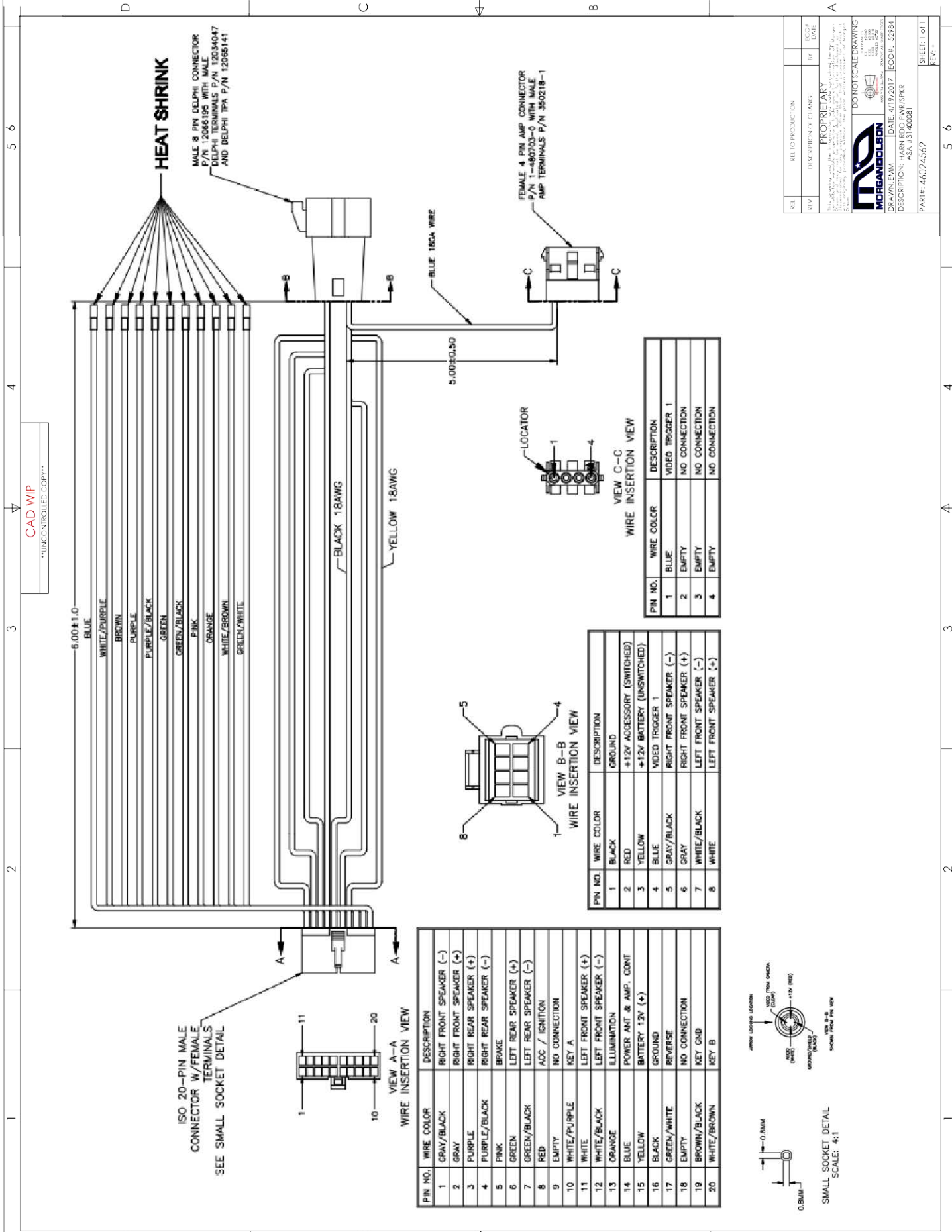
400" TO 600" = -0/+7"

OVER 600" = -0/+8"

BO TO BO = -0/+2"

TOLERANCE IS NOT ACCUMULATIVE. LENGTH ADJUSTMENTS TO OVERALL HARNESSES TO ALLOW BREAKOUT TO END, OR LOOM.





REV	REL TO PRODUCTION	BY	DATE
1	DESCRIPTION OF CHANGE		

**PROPRIETARY**

**DO NOT SCALE DRAWING**

**MORGAN-OLSON**  
CORPORATION  
1000 W. 10TH ST.  
MILWAUKEE, WI 53233-1000  
TEL: 414-400-0000  
FAX: 414-400-0001

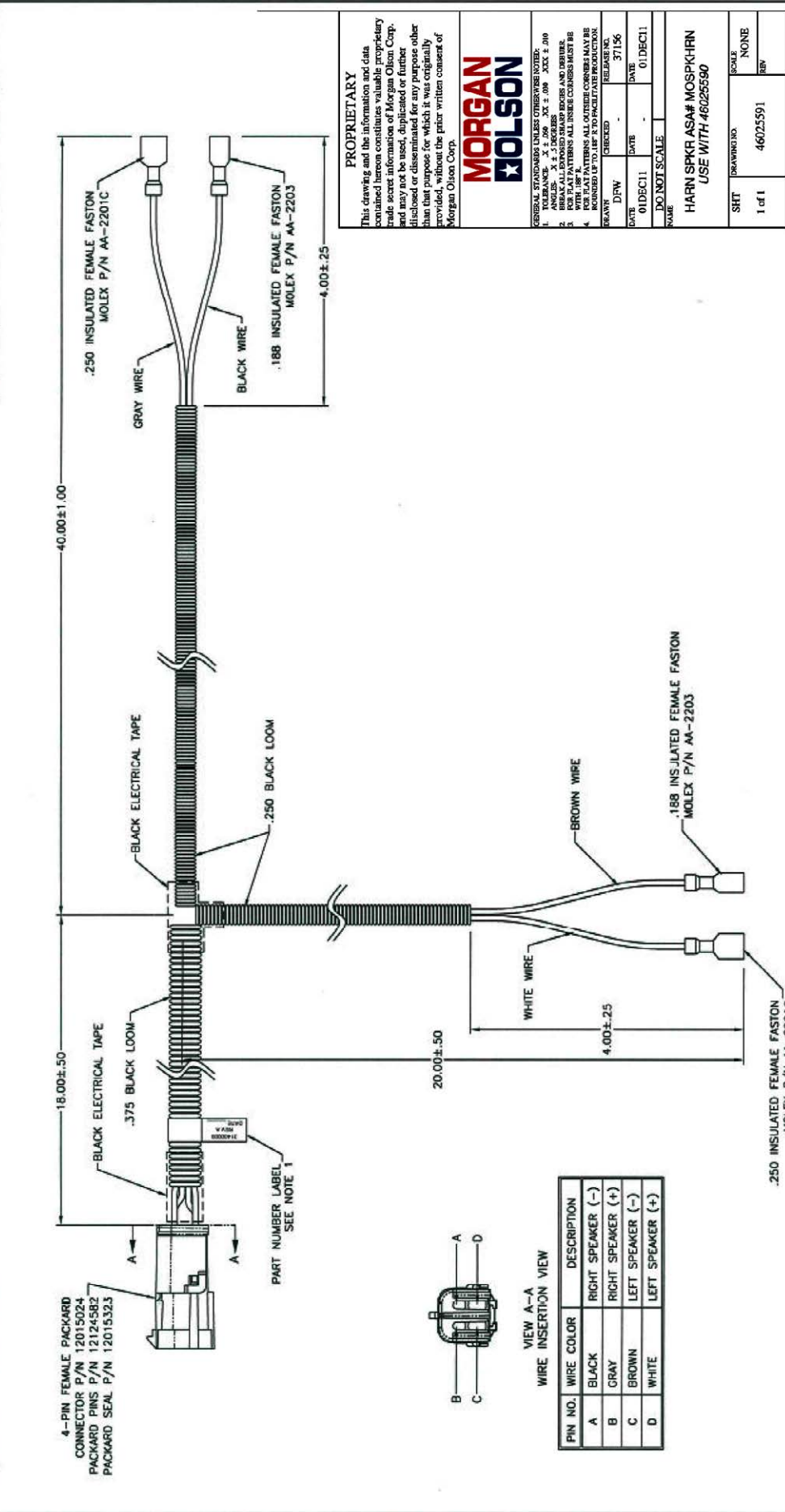
DESCRIPTION: WIRING HARNESS  
DATE: 4/19/2017  
EQUIP: 22984  
PART: 46024562

SHEET 1 of 1  
REV: 1



DESIGN REVISIONS		
REV	DATE	REVISION HISTORY
A	10/14/11	ORIGINAL

**NOTES:**  
 1) LABEL TO HAVE PART NUMBER, REVISION, AND DATE.  
 2) ALL WIRES TO BE 20 GAUGE



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GENERAL STANDARDS UNLESS OTHERWISE NOTED:  
 1. ANGLES: X & Y DEGREES  
 2. BREAK ALL DIMENSIONS UNLESS OTHERWISE NOTED  
 3. DIMENSIONS TO CENTER UNLESS OTHERWISE NOTED  
 4. DIMENSIONS TO FACE UNLESS OTHERWISE NOTED

DESIGNED BY	DATE	RELEASE NO.
DRAWN	DATE	37156
CHECKED	DATE	01DEC11
DATE	DATE	01DEC11
DO NOT SCALE		
NAME		
HARN SPKR ASA# MOSPK-HRN USE WITH 46025590		
SHEET	DRAWING NO.	SCALE
1 of 1	46025591	NONE
		REV

**31400009**

DESCRIPTION: HARNESS, 4 PIN PACKARD TO FASTON SPEAKERS

SCALE: N/A SHEET: 1 OF 1 DATE: 10/14/11 DRAWN BY: J.HAMILTON

REV: A

AS electronics  
 THE AVIATION ELECTRONIC SUPPLY CENTER

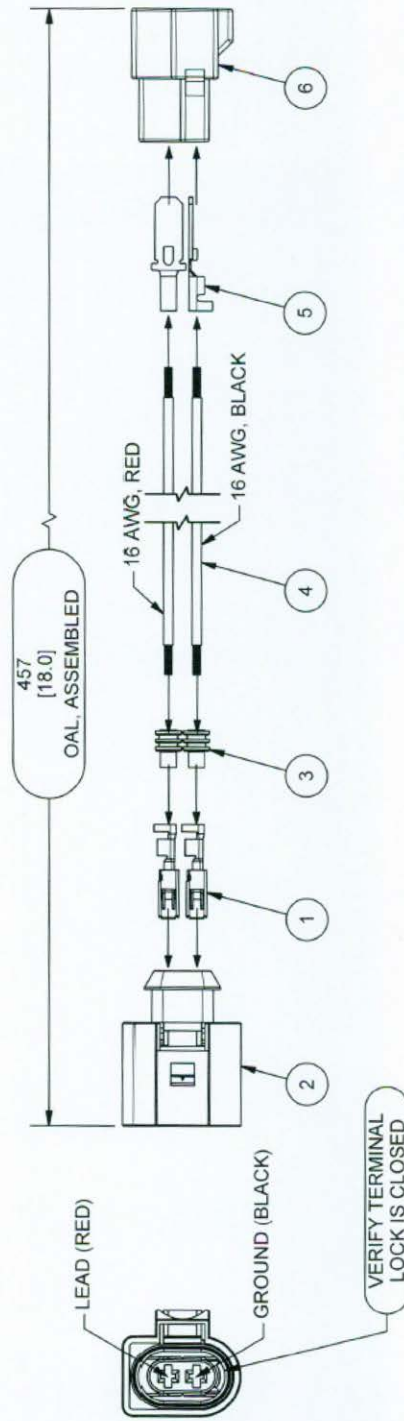
2800 Maple Dale  
 Ellettsville, IN 46124  
 www.asselectronics.com

**VIEW A-A**  
**WIRE INSERTION VIEW**

PIN NO.	WIRE COLOR	DESCRIPTION
A	BLACK	RIGHT SPEAKER (-)
B	GRAY	RIGHT SPEAKER (+)
C	BROWN	LEFT SPEAKER (-)
D	WHITE	LEFT SPEAKER (+)

REV	DESCRIPTION	BY	RELEAS
	RELEASE TO PRODUCTION	CHK	DATE

PARTS LIST		
ITEM	QTY	DESCRIPTION
1	2	AMP MCP2.8 FLAT TYPE RECEPTACLE
2	1	AMP MCP2.8, TE P/N: 1-968851-1
3	2	CONNECTOR, 2POS, AMP MCP2.8, TE P/N: 1-1355200-1
4	2	STRANDED WIRE, 16 AWG, INSULATED SX/LAEXF OR EQUIVALENT
5	2	Terminal, Male, 250 Type (KET ST40254-1) (Yasaki 71142020)
6	1	Housing, Female, 2 Terminal, 250 Type (KET MG620042) (Yasaki PN 71222128)



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GENERAL STANDARDS UNLESS OTHERWISE NOTED  
 1. TOLERANCE: X ± .060 XX ± .030 XXX ± .010  
 ANGLES: X ± .4 DEGREES  
 2. ALL SHARP EDGES AND DEBURR.  
 3. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED.  
 4. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

DRAWN	CHECKED	RELEASE NO.
ALL	45440	
DATE	DATE	DATE
17JUN15	17JUN15	17JUN15

DO NOT SCALE  
 HARN PGTL PUMP WSWA 2015  
 AM EQUIP #310-1117

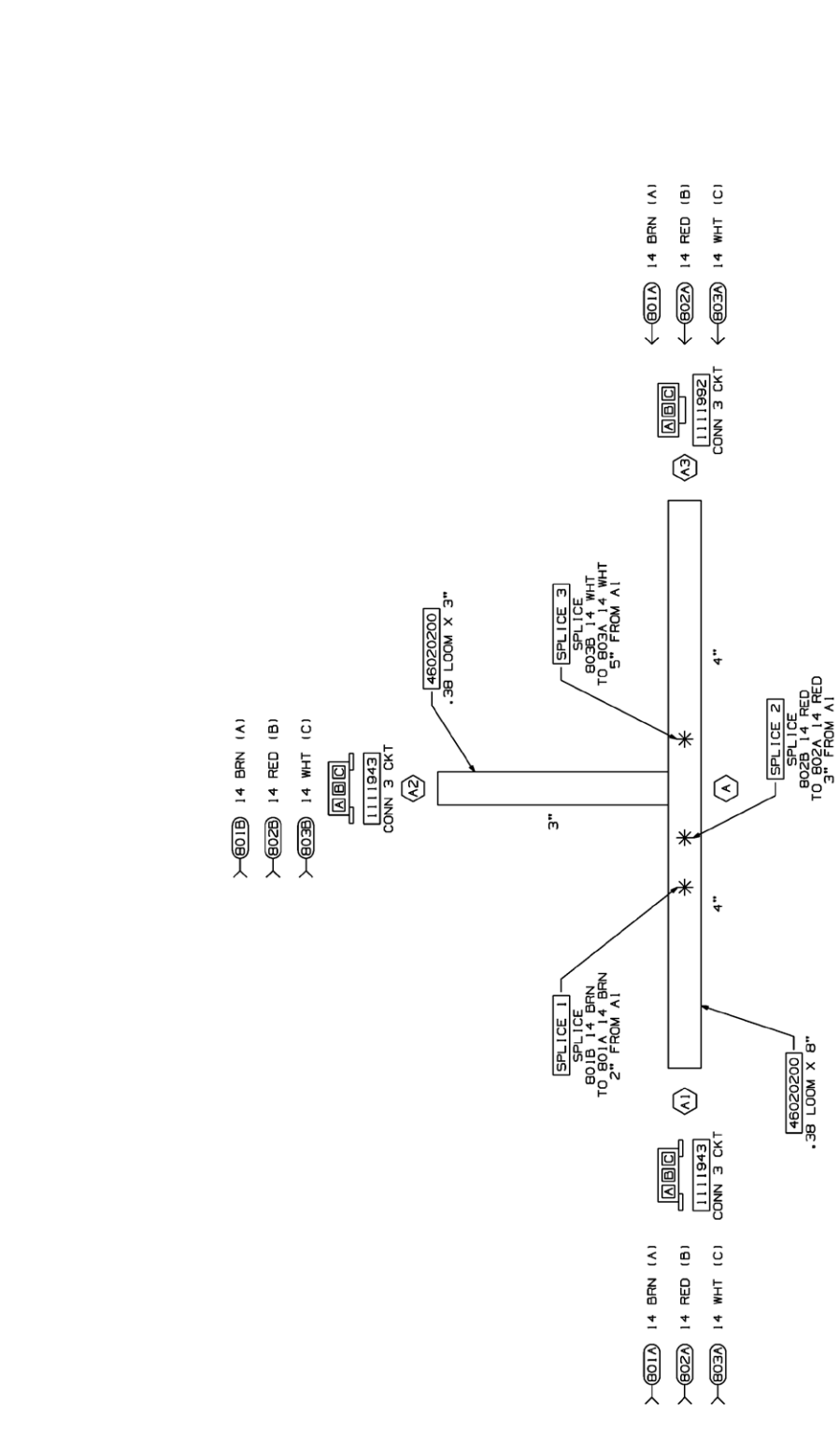
SHT	DRAWING NO.	SCALE
1 of 1	47004506	NONE
REV		REL

DRAWING NO.	REV	SHT
47004506	REL	1 of 1

Project	818-0122	Designed by	RR/AS	10/22/2013	Approved by	RR/AS	10/22/2013	Material Specification	N/A	Finish Specification	N/A
TOLERANCES UNLESS OTHERWISE SPECIFIED		1 PLACE DEC =	N/A	MM	±0.25	2 PLACE DEC =	±0.01	INCHES	±0.13	Title/Name	Wire Harness, KET to 2 MCP, 2 wire, 18", CBL-13452-B-0457
3 PLACE DEC =	±0.005	4 PLACE DEC =	±0.0025	N/A	±0.08	ANGULAR DIM =	±1°	DO NOT SCALE DRAWING	WORK TO GIVEN DIMENSIONS	Part Number	310-1117
AM EQUIPMENT	Jefferson, Oregon 97352	www.amequipment.com	THIS DRAWING IS THE SOLE PROPERTY OF AM EQUIPMENT AND CANNOT BE REPRODUCED IN ANY WAY WITHOUT THE EXPRESS WRITTEN PERMISSION OF AM EQUIPMENT			Revision	0	Sheet	1 OF 1	10/22/2013	

DRAWING NO.	REV	SHT
BB117437		1 OF 1
REV.	DESCRIPTION	DATE
	RELEASE TO PRODUCTION	TMC

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
B01A	14 BRN 008 1111944 OE 46018504	A1, A3	GENERIC
B01B	14 BRN 005 1111944 OE 5TR .25	A2, SPLICE 1	GENERIC
B02A	14 RED 008 1111944 OE 46018504	A1, A3	GENERIC
B02B	14 RED 004 1111944 OE 5TR .25	A2, SPLICE 2	GENERIC
B03A	14 WHT 008 1111944 OE 46018504	A1, A3	GENERIC
B03B	14 WHT 004 1111944 OE 5TR .24	A2, SPLICE 3	GENERIC



REV.	DESCRIPTION	DATE
	RELEASE TO PRODUCTION	TMC

**PROPRIETARY**  
MORGAN OLSON  
GENERAL STANDARDS UNLESS OTHERWISE NOTED:  
1. DIMENSIONS IN INCHES, DECIMALS, AND FRACTIONS.  
2. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
3. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
4. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
5. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
6. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
7. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
8. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
9. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.  
10. DIMENSIONS IN MILLIMETERS, WHOLE NUMBERS, AND DECIMALS.

DATE	27FEB02	DATE	28FEB02
DATE	28FEB02	DATE	28FEB02
DATE	02-0241	DATE	02-0241
DATE	02-0241	DATE	02-0241
DATE	02-0241	DATE	02-0241
DATE	02-0241	DATE	02-0241

HARNES AND LOOM TOLERANCES  
UP TO 60" = -0/+2"  
60" TO 100" = -0/+4"  
100" TO 200" = -0/+5"  
200" TO 400" = -0/+6"  
400" TO 600" = -0/+7"  
OVER 600" = -0/+8"  
BO TO BO = -0/+2"  
TOLERANCE IS NOT ACCUMULATIVE. LENGTH APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

NOTES:  
1. GXL WIRE.  
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.  
3. HARNES TO HAVE A LABEL SHOWING GRUMMAN OLSON LEVEL NUMBER, REVISION LEVEL NUMBER, DATE OF MANUFACTURE.  
4. TAPE (1111088): 6" AT BREAKOUTS AND 2" AT LOOM ENDS.  
5. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR SO FABRICATION IF NECESSARY.  
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.  
7. HARNES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.  
8. VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.  
9. HARNES TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.  
10. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.

SCALE NONE  
DRAWING NO. 88117437  
REV