

Purolator

We deliver Canada

2016 Parts Catalog



Ford E-350 Chassis

2016 Morgan Olson Body



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This parts catalog applies to the following package delivery vehicles;			
VIN #	UNIT #	VIN #	UNIT#
1FC3E3KL0GDC06204			
1FC3E3KL0GDC06205			
1FC3E3KL0GDC06206			
1FC3E3KL0GDC06207			
1FC3E3KL0GDC06208			
1FC3E3KL0GDC06209			

This parts guide contains illustrations and part numbers for PUROTALOR Package Delivery Vehicles and applies to bill of material # CV102995 produced from 2015 to 2018.

This book has been divided into chapters.

Each chapter has illustrations with part numbers and descriptions.

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.

Items listed as "Installations" include all fasteners and parts required for completion.

Items listed as "Assemblies" include the parts but do not include the common fasteners; nuts, bolts, rivets and washers, required for completion.

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 number.
3. Contact a Morgan Olson Service Parts Representative. Have part numbers readily available.
4. When placing orders, specify serial numbers.

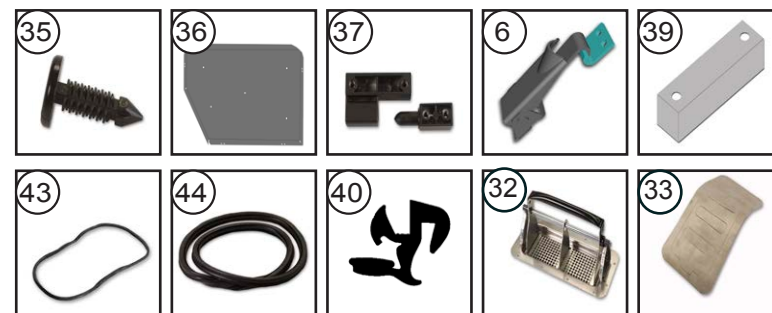
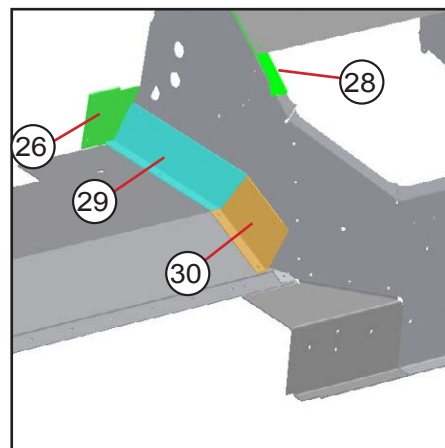
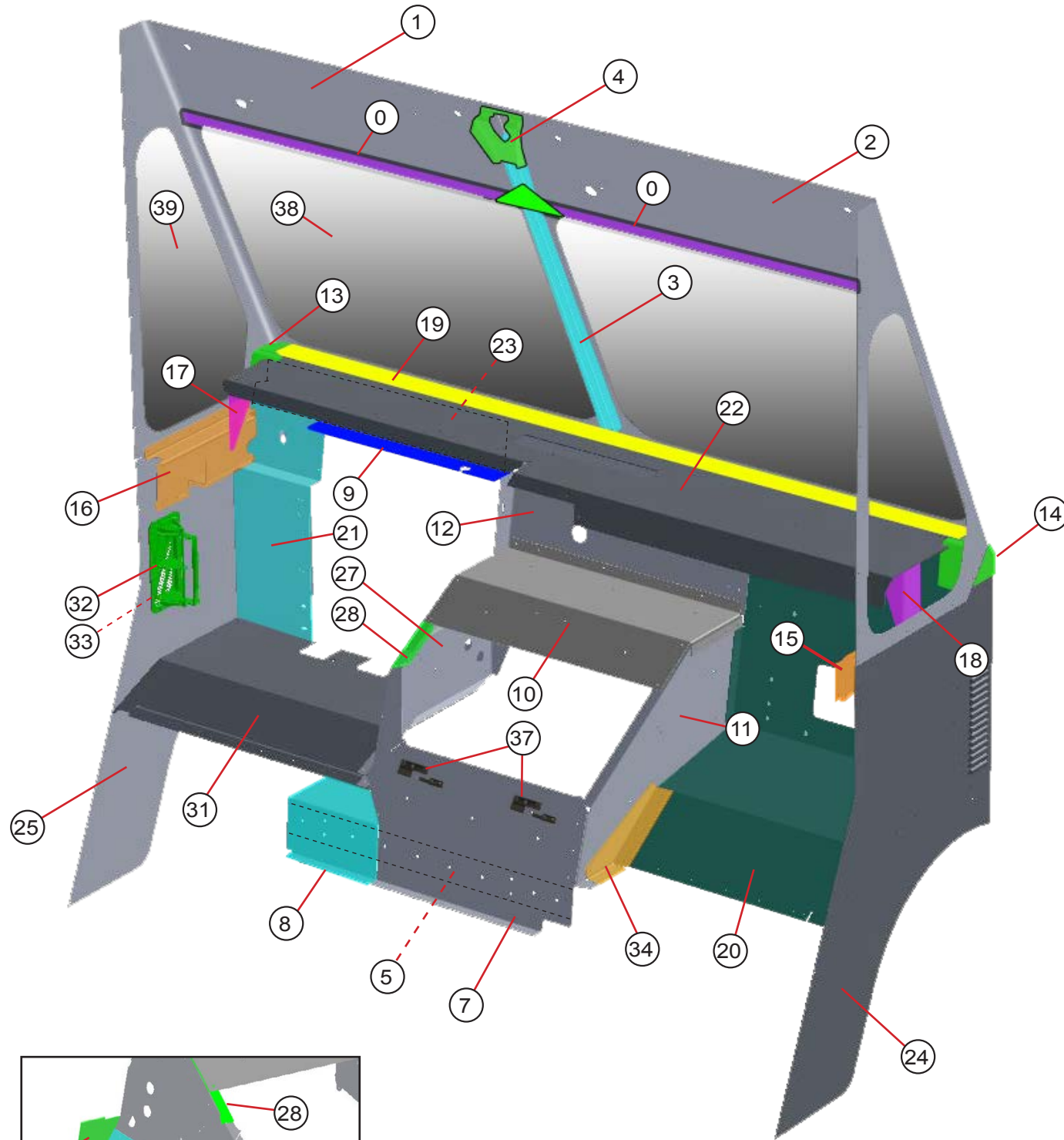
Parts are also available from our parts website at www.morganolsonparts.com.

FOR WARRANTY INFORMATION CALL 1-800-262-3437

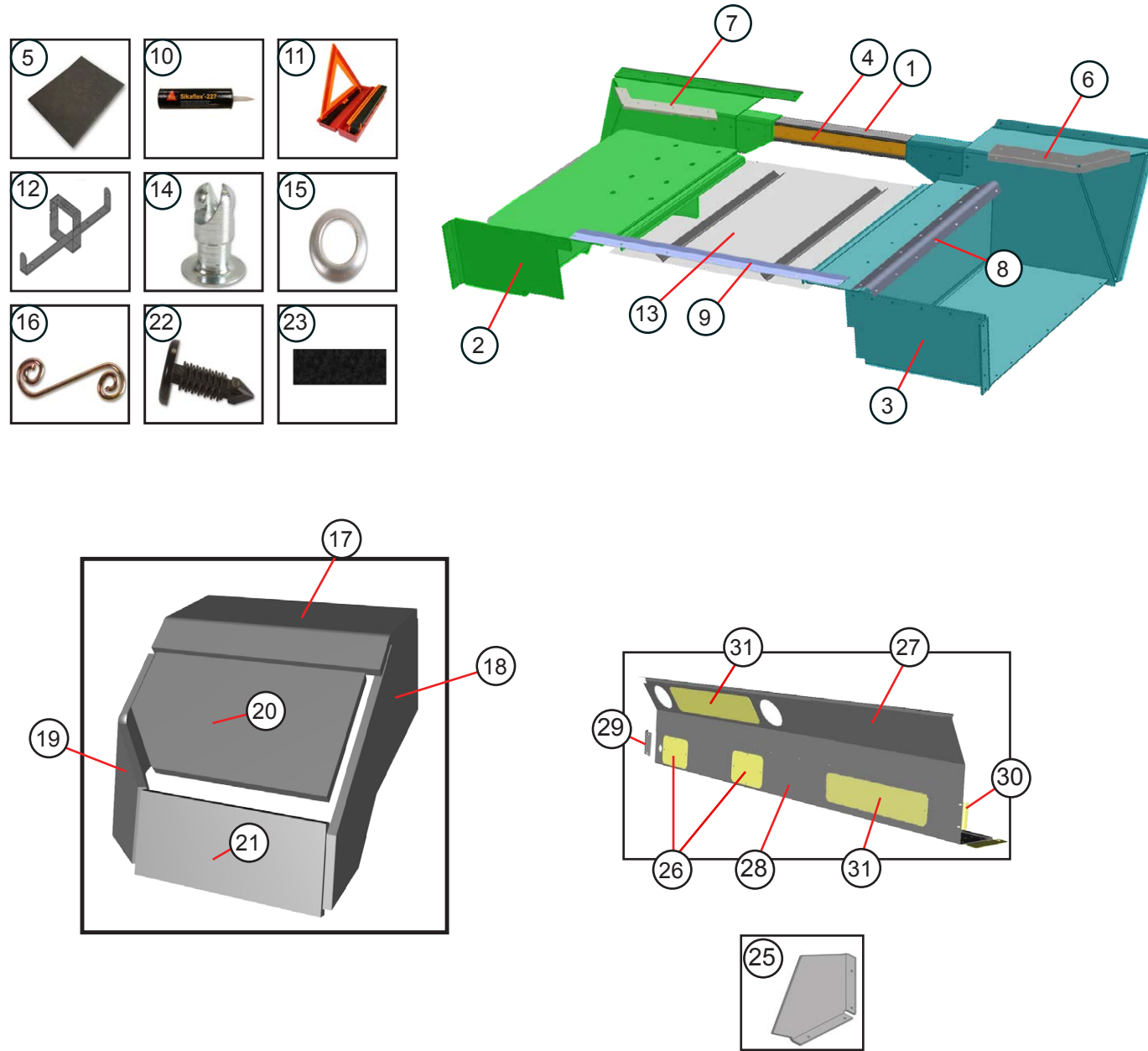
ANY QUESTIONS OR CONCERNS SHOULD BE DIRECTED TO YOUR SERVICE PARTS REPRESENTATIVE AT 1-800-233-4823

At Morgan Olson, our quest for quality and safety is ongoing and therefore the specifications on the product described herein may vary over time.

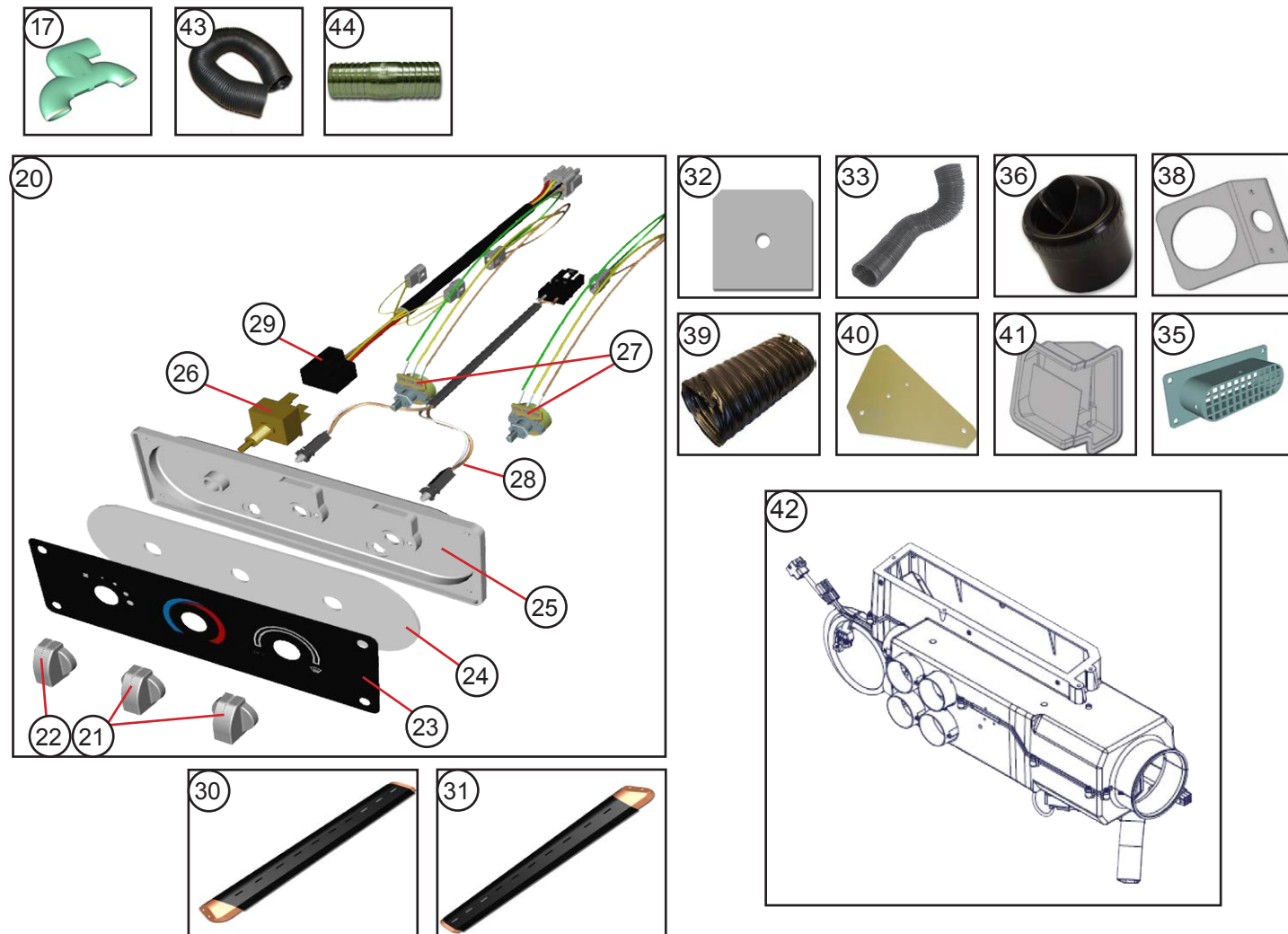
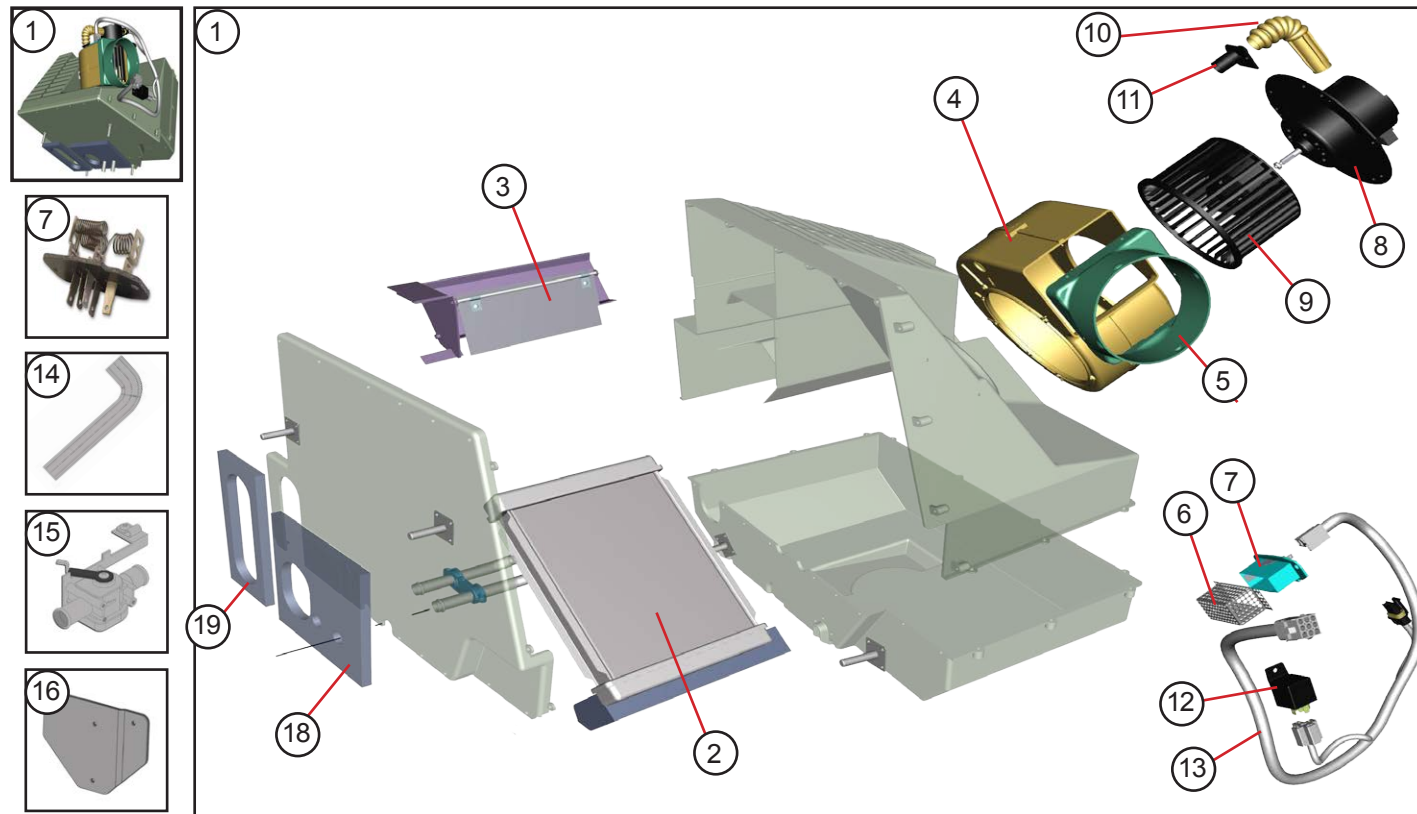
Please contact Morgan Olson for the latest product information and available safety features and options.



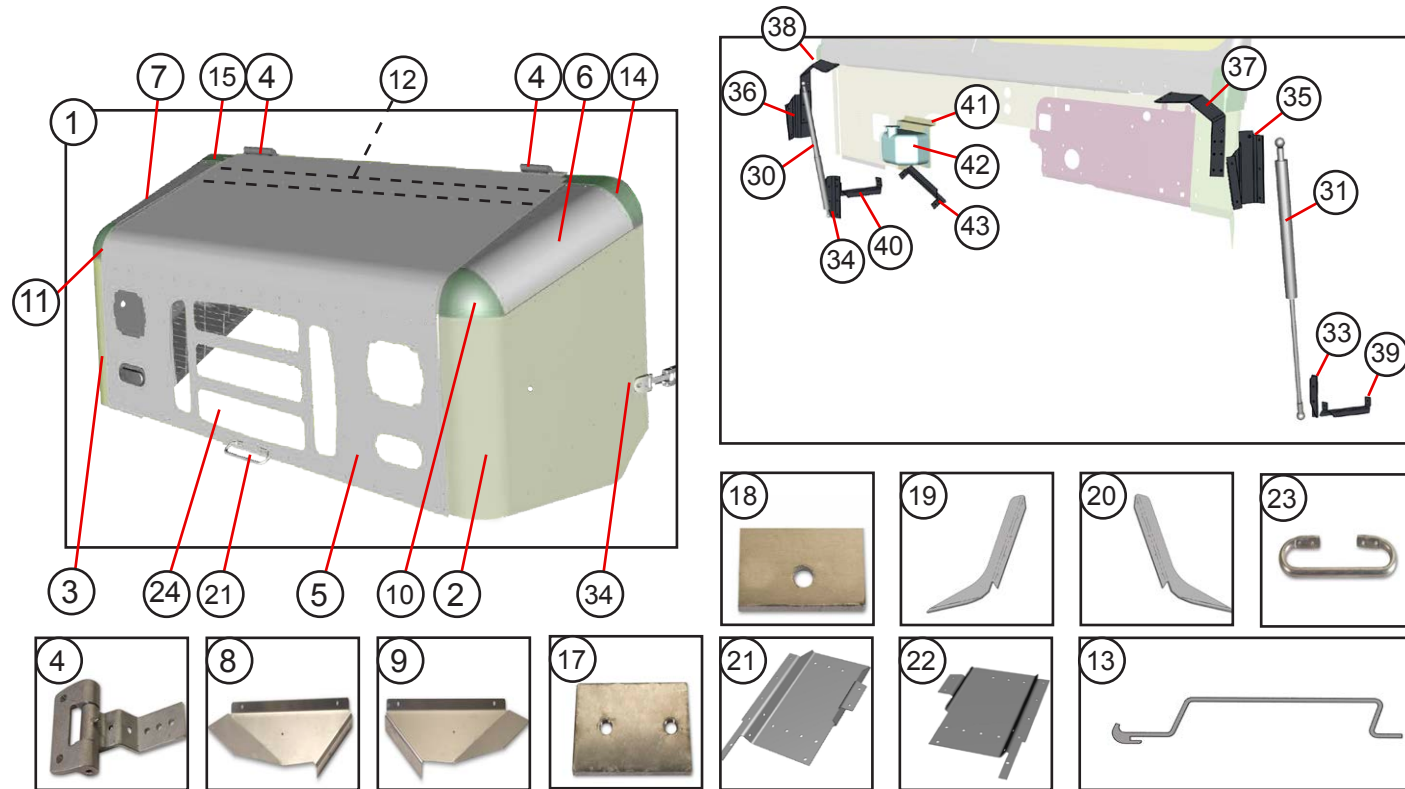
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
0	077055405	STIFFENER W/S AL 450540X41.75	2	EA
1	088055409	FRAME W/S AL .102X49.72X67.27 LH	1	EA
2	088055410	FRAME W/S AL .102X49.72X67.27 RH	1	EA
3	077055400	POST W/S CENTER AL 450540X40	1	EA
4	077055402	GUSSET FRAME W/S AL .125X6.49X7.27	1	EA
4	998555329	GUSSET FRAME W/S (TRIANGLE)	1	EA
5	117028400	SHIM ENGINE BOX	2	EA
6	47000932	LATCH ENGINE BOX ADJUSTABLE DRAW	2	EA
7	105005410	ENGINE BOX SADDLE AL .125X22.23X32.17	1	EA
8	105005412	ENGINE BOX SADDLE FILLER AL.125X11.84X13.8 LH	1	EA
9	095005482	UPPER DASH WALL AL .102X4.6X23.74 LH	1	EA
10	095005437	ENGINE BOX TOP AL.102X15.68X30.51	1	EA
11	095005440	ENGINE BOX PANEL AL .102X21.47X29.31 RH	1	EA
12	095005442	DASH CAB WALL AL .102X15.14X31.46	1	EA
13	8502000	CORNER AL CAST W/S LH	1	EA
14	8502001	CORNER AL CAST W/S RH	1	EA
15	083005522	STIFFENER W/S AL .125X10.93X17.81 RH	1	EA
16	083005521	STIFFENER W/S AL .125X10.93X17.81 LH	1	EA
17	083005418	SUPPORT RAIL W/S AL .102X5.74X8.27 LH	1	EA
18	083005419	SUPPORT RAIL W/S AL .102X5.74X8.27 RH	1	EA
19	083023401	RAIL W/S 93W AL 851100X84	1	EA
20	155005401	TOE-BOARD AL.125X29.97X47.46 RH	1	EA
21	095005434	DASH WALL OUTER AL.102X13.64X28.36	1	EA
22	093005461	SHELF DASH AL .102X13.74X89	1	EA
23	095005430	DASH WALL UPPER AL .102X7.36X36.26 LH	1	EA
24	155005408	CAB SKIRT AL .07X40.60X45.91 RH	1	EA
25	095005444	CAB SKIRT AL .07X40.60X45.91 LH	1	EA
26	115005452	CLOSURE CAB AL .07X4.67X6.6	1	EA
27	115005454	PANEL ENGINE BOX AL .07X18.32X23.39 LH	1	EA
28	095005439	PANEL ENGINE BOX AL .102X2.94X9.5	1	EA
29	115005450	ADAPTER E/BX AL .102X4.36X13.39	1	EA
30	115005451	ADAPTER E/BX AL .102X4.44X8.88	1	EA
31	155005400	TOE-BOARD AL .102X21.03X34.05 LH	1	EA
32	47008545	VENT AL 2WAY HINGE LESS	1	EA
33	47008548	GASKET FOR VENT 47008545	1	EA
34	077050406	GUSSET TOE-BOARD AL .125X5.33X14.88 RH	1	EA
35	47006630	CLIP PLASTIC ROUND/HOOD 1.32-1.34	10	EA
36	145028401	LID ENGINE BOX AL .102X18.35X32.44	1	EA
37	47007859	HINGE OFFSET	2	EA
38	005756400	GLASS W/S FRONT 31.29X41.54	2	EA
39	083056401	GLASS 81H TRIANGLE 30 DEG	2	EA
40	44004304	WEATHERSTRIP GLASS 1660 X142.5	2	EA
40	44004305	WEATHERSTRIP GLASS 1660 X85.5	2	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	077240400	CROSSMEMBER CENTER AL 456106X41	1	EA
2	105024206	STEP ASSEMBLY WELDMENT ROADSIDE 88W F59	1	EA
3	095024241	STEP ASSEMBLY WELDMENT CURBSIDE 88W F59	1	EA
4	077050402	SHIM AL .25X1.62X20.8	1	EA
5	42002059	PAD DAMPENING 45200007X9X20	1	EA
6	090019401	TRIM TOEBOARD ALD .08X7.89X22.64 RH	1	EA
7	083019403	TRIM TOEBOARD ALD .08X2.66X31.58 LH	1	EA
8	090019403	TRIM STEP ALD .08X2.69X26.5 RH	1	EA
9	083019413	TRIM MAT @ O/LINE ALD .08X2.29X63.41	1	EA
10	41002103	SEALANT/ADHESIVE	2	EA
11	47009547	KIT 3 TRIANGLES IN BOX	1	EA
12	47009548	BRACKET MOUNTING TRIANGLE KIT	1	EA
13	115024207	TRANSVERSE FLOOR PLATE WELDMENT	1	EA
14	40900080	STUD	7	EA
15	40900081	GROMMET HALF	7	EA
16	40900082	SPRING	7	EA
17	095005455	INSUL E/BX PSA 1X12.18X28.34	1	EA
18	093005405	INSUL E/BX PSA 1X17.56X27.46 RH	1	EA
19	105005456	INSUL E/BX42002056X17.43X32.37	1	EA
20	105005457	INSUL E/BX 42002056X8.09X22.61	1	EA
21	105005458	INSUL E/BX SADDLE 42002056X7X21.5	1	EA
22	47006630	CLIP PLASTIC ROUND HEAD	15	EA
23	45200345	PLATE STEP FBG ANTI SLIP .125X13.84X25.13	1	EA
25	088076451	DIVIDER SHELF AL .102X9.01X9.46	1	EA
26	088076431	PLATE COVER WPR MTR AL .102X5X12	2	EA
27	155076401	COVER MOTOR WPR AL .102XX10.87X82.5	1	EA
28	155076400	SHELF COVER AL .102X16.63X85.31	1	EA
29	088076449	BRACKET MOUNTING AL .102X2.36X3.9 LH	1	EA
30	088076450	BRACKET MOUNTING AL .102X2.36X3.9 RH	1	EA
31	097076435	PLATE COVER ACC AL .070X6X28.38	2	EA



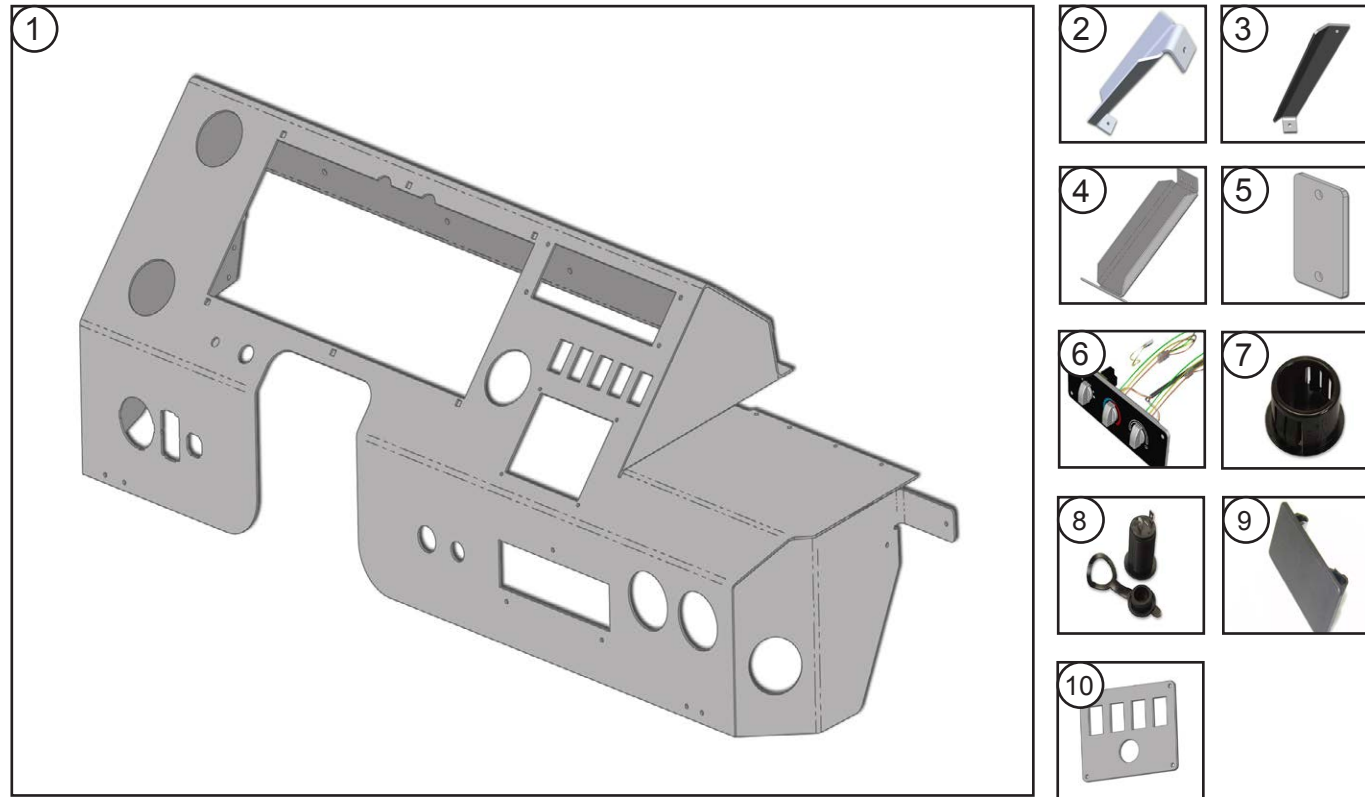
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	555001014	HEATER CORE	1	EA
2	47008760	HEATER COIL W/GASKET & CLAMP	1	EA
3	47008753	DOOR W/SEAL	1	EA
4	47008754	BLOWER HOUSING	1	EA
5	47008755	BLOWER ADAPTER	1	EA
6	47008732	RESISTER CAGE	1	EA
7	47008357	RESISTER	1	EA
8	47008756	BLOWER MOTOR	1	EA
9	47008757	BLOWER WHEEL	1	EA
10	47008730	VENT TUBE	1	EA
11	47008731	VENT TUBE ADAPTER	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
16	115080401	BRACKET MOUNTING FOOT DUMP AL .07X4.25X7.45	1	EA
17	090080401	DUCT FT DUMP SPECIAL	1	EA
18	21-01201	GASKET - PART OF HEATER ASSEMBLY	1	EA
19	21-01202	GASKET - PART OF HEATER ASSEMBLY	1	EA
20	555001413	CONTROL PANEL ASSEMBLY	1	EA
21	47008706	KNOB	2	EA
22	47008735	KNOB	1	EA
23	47008707	DECAL	1	EA
24	47008708	LIGHT PANEL	1	EA
25	47008709	CONTROL SUB PANEL	1	EA
26	47008700	BLOWER SWITCH	1	EA
27	47008710	POTENTIOMETER SWITCH	2	EA
28	47008711	HARNES ILLUMINATION W/BULBS	1	EA
29	47008712	HARNES BLOWER MOTOR	1	EA
30	555001721	DEFROST DUCT CURBSIDE METAL	1	EA
31	555001722	DEFROST DUCT ROADSIDE METAL	1	EA
32	093080400	HOLD DOWN PLATE DEFROSTER DUCTS	4	EA
33	555001524	HOSE DEFROSTER 2.5X30	1	EA
34	555001525	HOSE DEFROSTER 2.5X38 (2X DEFROSTER / 1XFOOT DUMP)	3	EA
35	555002003	COLLAR FRESH AIR INTAKE	1	EA
36	555001715	LOUVER BALL	6	EA
38	555002007	PLNM FA HVAC SI WALL E-SER (HOSE - 555002008)	1	EA
39	555001533	HOSE BLOWER HEATER/DEFROSTER 5\"X7.5\"	1	EA
40	005780402	MOUNTING PLATE	1	EA
41	002080400	BRACKET HEATER CONTROL AL .102X3X11.67	1	EA
42	555001321	DUCT HVAC	1	EA
43	555001523	HOSE DEFROSTER 2.5X16	1	EA
44	47008017	CONNECTOR STRAIGHT .62ID BLACK NYLON	2	EA



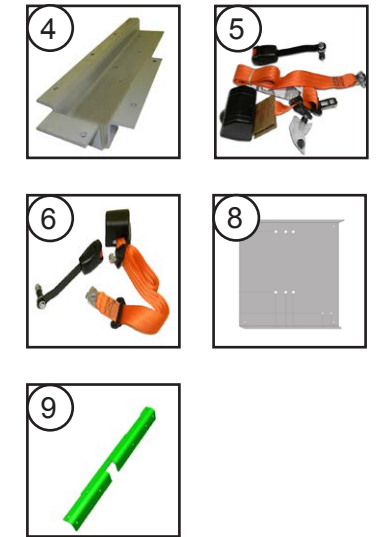
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1	095017206	HOOD ASSEMBLY	1	EA
2	095017405	HOOD SKIRT AL .07X27.89X29.9 ROADSIDE	1	EA
3	095017406	HOOD SKIRT AL .07X27.89X29.9 CURBSIDE	1	EA
4	47007852	HINGE ASSEMBLY	2	EA
5	105017401	PANEL HOOD AL .07X48.92X69	1	EA
6	095017407	COWL HOOD ROADSIDE AL .07X15.19X17.47 LH	1	EA
7	095017408	COWL HOOD CURBSIDE AL .07X15.19X17.47 RH	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	088017419	STIFFENER HOOD AL 450015X63.62	1	EA
13	45001500	BRACKET HOOD AL HOOD X69.77	1	EA
14	45100060	CAP COWL END ROADSIDE	1	EA
15	45100061	CAP COWL END CURBSIDE	1	EA
17	91617304	PLATE TAP AL .188X2X2.69	2	EA
18	96717312	SHIM HOOD AL .125X.62X1.88	2	EA
19	095017420	STIFFENER HOOD AL .102X15.92X22.83 LH	1	EA
20	095017421	STIFFENER HOOD AL .102X15.92X22.83 RH	1	EA
21	095017422	STIFFENER HOOD AL .102X10.98X12 LH	1	EA
22	095017423	STIFFENER HOOD AL .102X10.98X12 RH	1	EA
23	90187300	GRAB HANDLE .5DIA X15.7	1	EA
24	45700101	MESH GRILLE 20.5X38.81	1	EA
NS	44004077	SEAL TAPE #1458BTXFT	4.42	FT



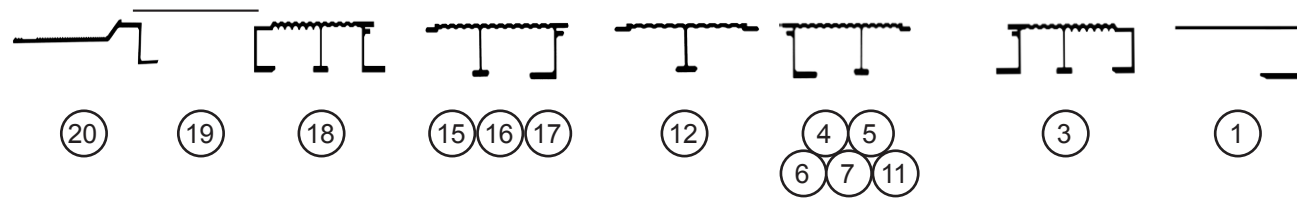
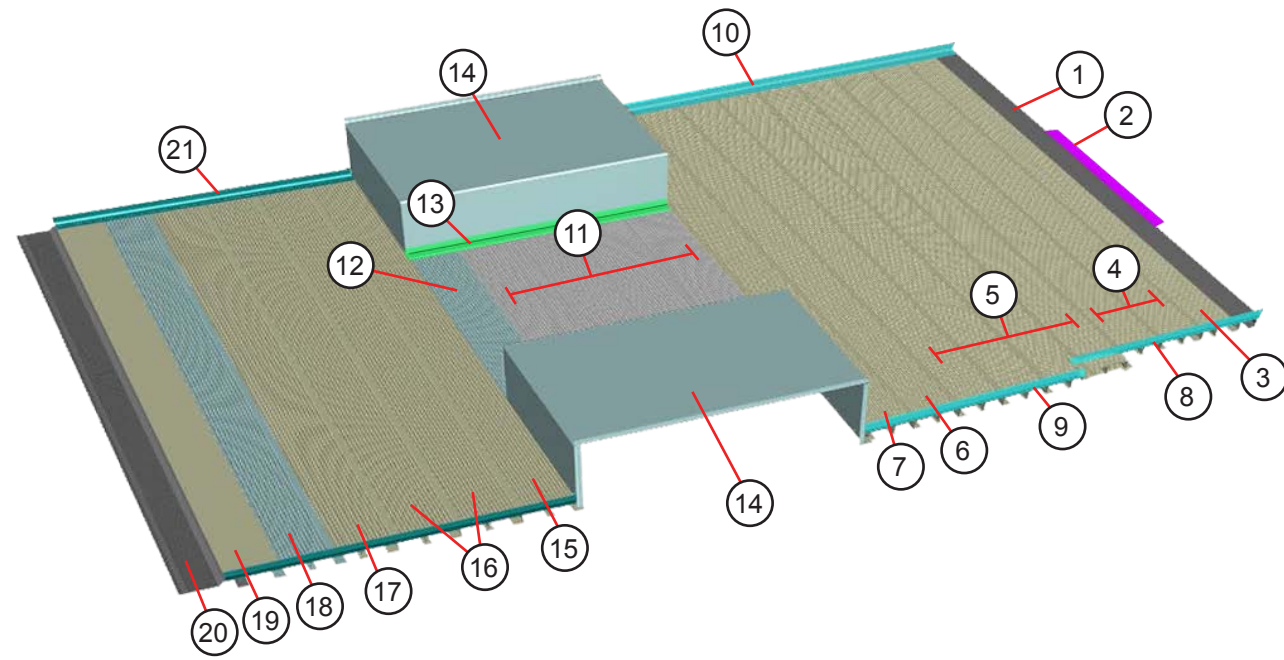
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29	44002004	BUMPER RUBBER HOOD STOP	2	EA
30	47006105	GAS SPRING WITH LOCK 110 LB	1	EA
31	47006106	GAS SPRING WITH OUT LOCK 110 LB	1	EA
32	47006086	STUD BALL .31-18	4	EA
33	077160405	BRACKET LOWER HOOD AL .188X2.84X6.34 LH	1	EA
34	077160406	BRACKET LOWER HOOD AL .188X2.84X6.34 RH	1	EA
35	077160400	BRACKET HOOD AL .125X6.76X7.75 LH	1	EA
36	077160401	BRACKET HOOD AL .125X6.76X7.75 RH	1	EA
37	095016401	BRACKET GAS SPRING AL .125X6.41X16.41 LH	1	EA
38	095016402	BRACKET GAS SPRING AL .125X6.41X16.41 RH	1	EA
39	095016403	CAB SKIRT SUPPORT AL.125X3.38X11.18 LH	1	EA
40	095016404	CAB SKIRT SUPPORT AL.125X3.38X10.74 RH	1	EA
41	093063400	BRACKET BOTTLE AL .102X14.23X23.74	1	EA
42	47004505	FLUID BOTTLE WINDOW WASHER W/PUMP	1	EA
43	093063401	BRACE BOTTLE BRACKET AL .102X2.28X11.24	1	EA
44	095017202	GRILLE SUPPORT WELDMENT HOOD 88W	1	EA
45	45700101	GRILLE MESH	1	EA
46	46000206	HEADLAMP	2	EA
47	47000613	LATCH HOOD	2	EA
48	43000903	LABEL HOOD PROPER OPERATION	1	EA



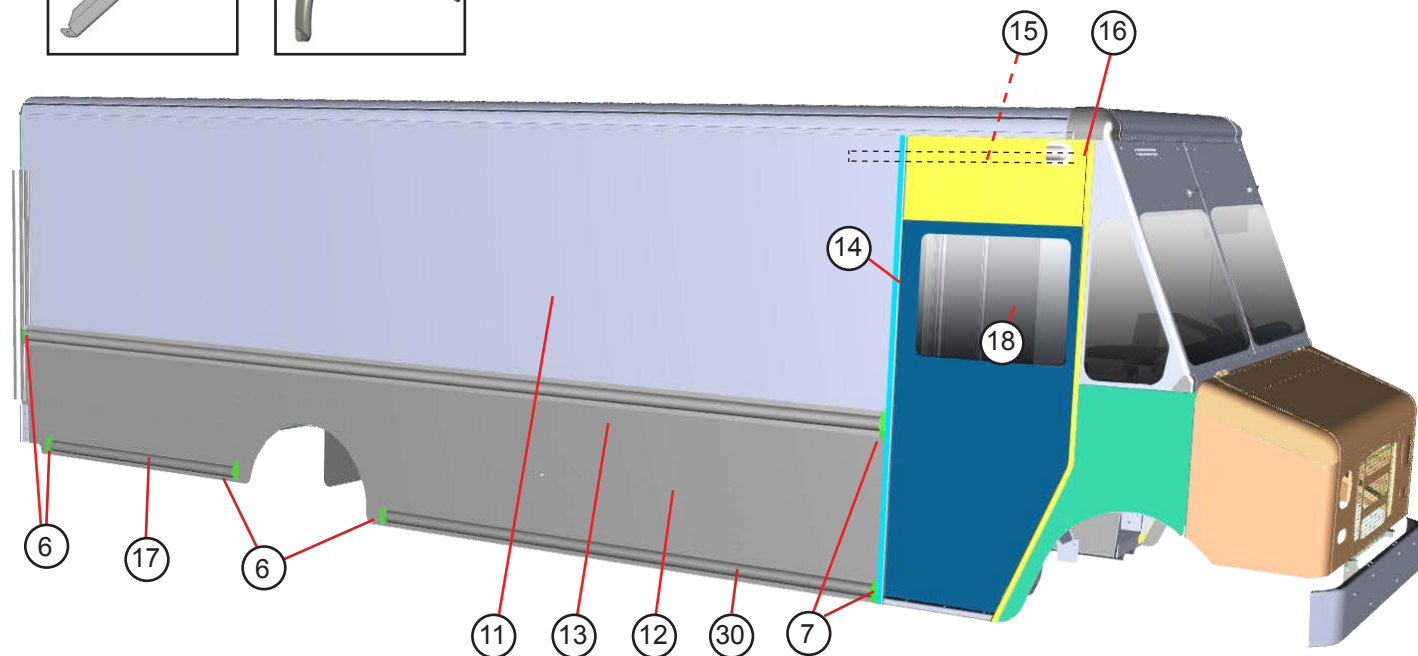
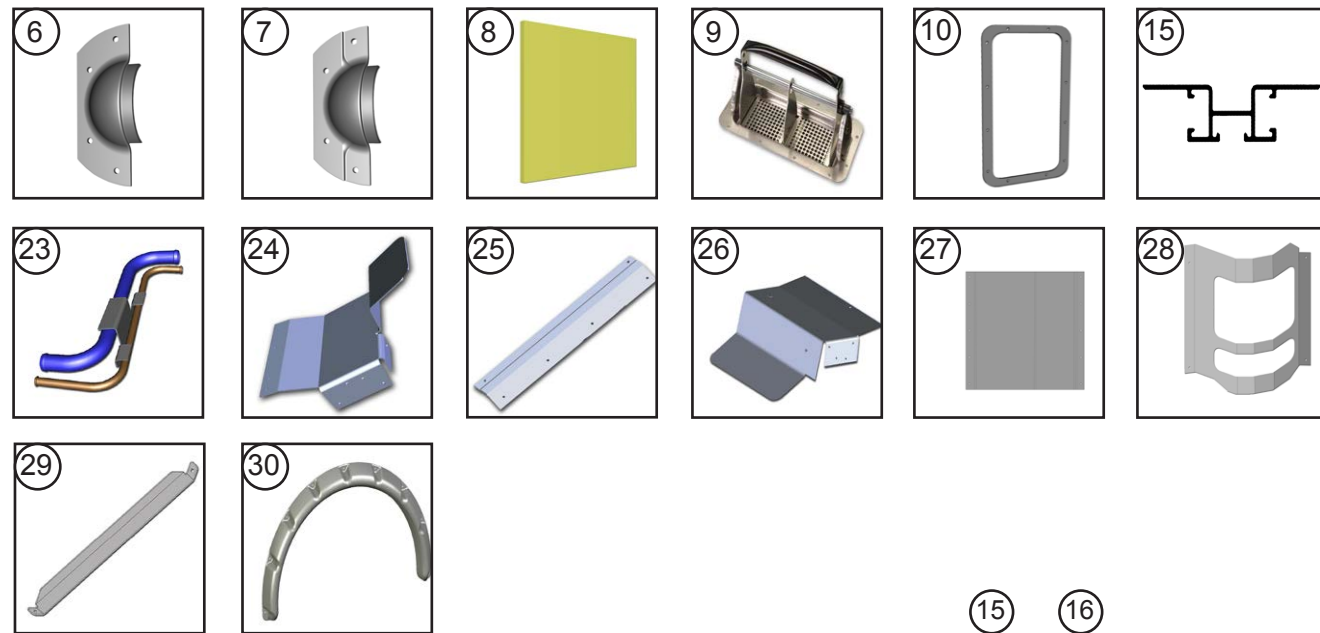
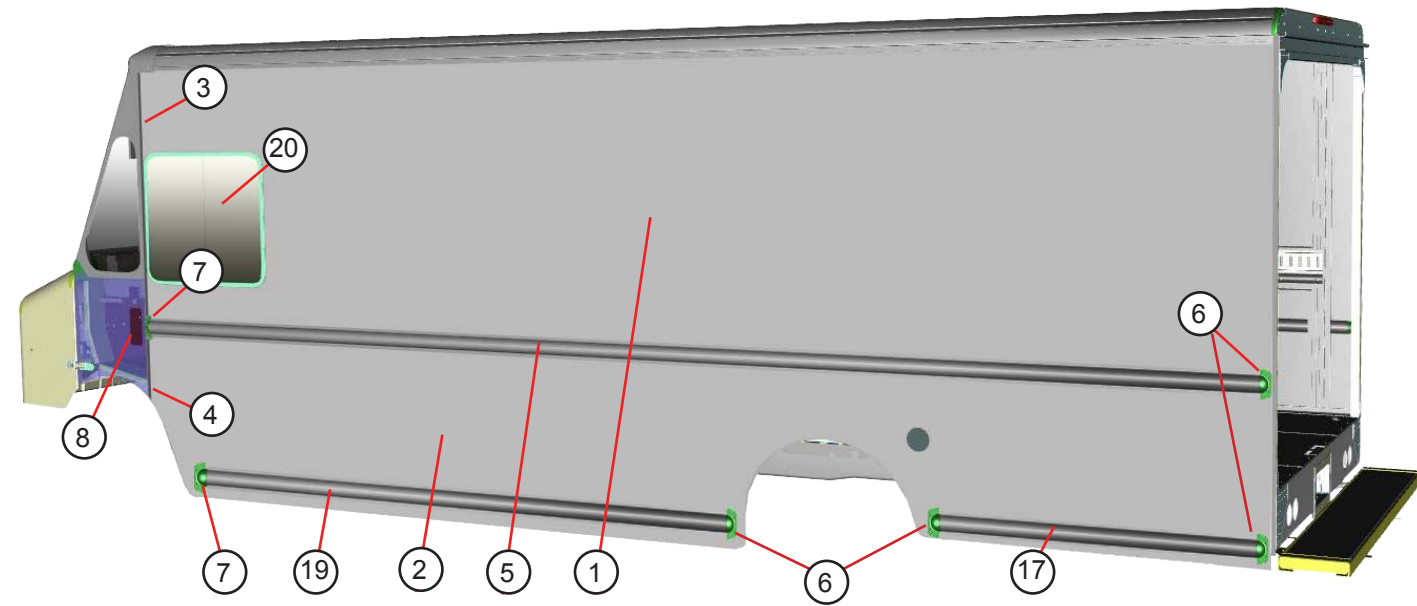
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1	095027207	INSTRUMENT PANEL WELDMENT FORD	1	EA
2	095027412	BRACE INSTRUMENT PANEL AL .102X3.43X18.39LH	1	EA
3	093027402	BRACKET STIFFENER AL .125X1.91X12.66	1	EA
4	093027403	BRACKET REINFORCEMENT AL .102X4.32X10.18	1	EA
5	095027408	BLOCK OFF PLATE AL .102X1.32X2.30	1	EA
6	555001413	PANEL CONTROL HVAC	1	EA
7	1111513	PLUG BLACK ROUND	1	EA
8	46026378	RECEPTACLE 12 V	1	EA
9	46023506	PLATE FILLER ROCKER SWITCH	4	EA
10	006327437	PLATE FILLER 4RKR AL .07X4.5X5.5	1	EA



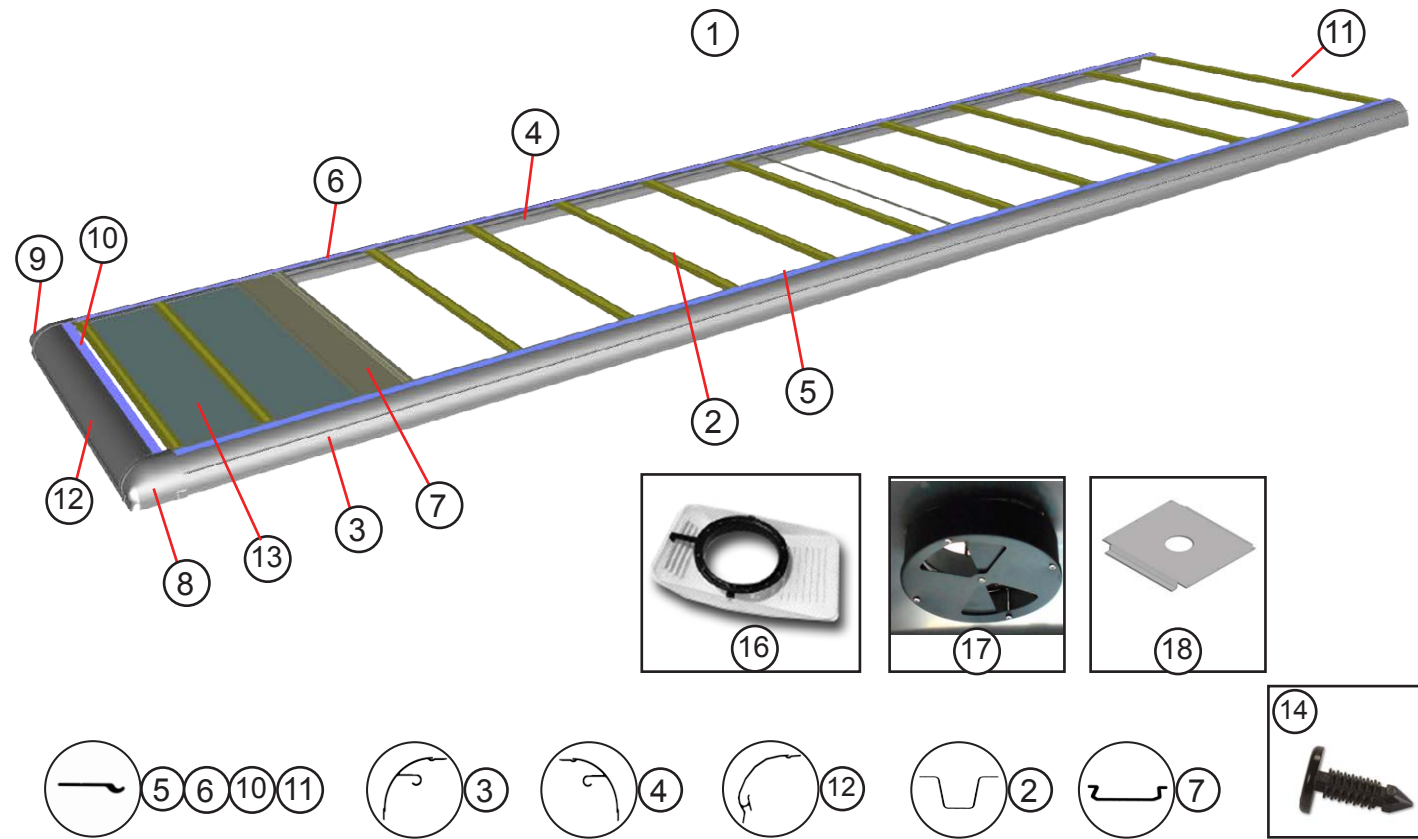
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47002685	SEAT DRIVER W/ 6" SLIDES	1	EA
NS	47012685	SEAT ONLY WITHOUT SLIDES	1	EA
2	47002686	SEAT BASE	1	EA
3	47011208	ARM REST ROADSIDE	1	EA
4	98M582030	BRACE SUPPORT STEEL 7GAX9.43X23.43	1	EA
5	47004365	SEAT BELT WITH BOOT ADJUSTABLE D OGANGE	1	EA
6	47004365	SEAT BELT With BOOT BULKHEAD 3POINT OGANGE	1	EA
7	47002687	JUMP SEAT	1	EA
8	150069400	PLATE REINFORCEMENT JUMP SEAT	1	EA
9	91614300	ANGLE FLOOR .188X2.84X19.1	1	EA



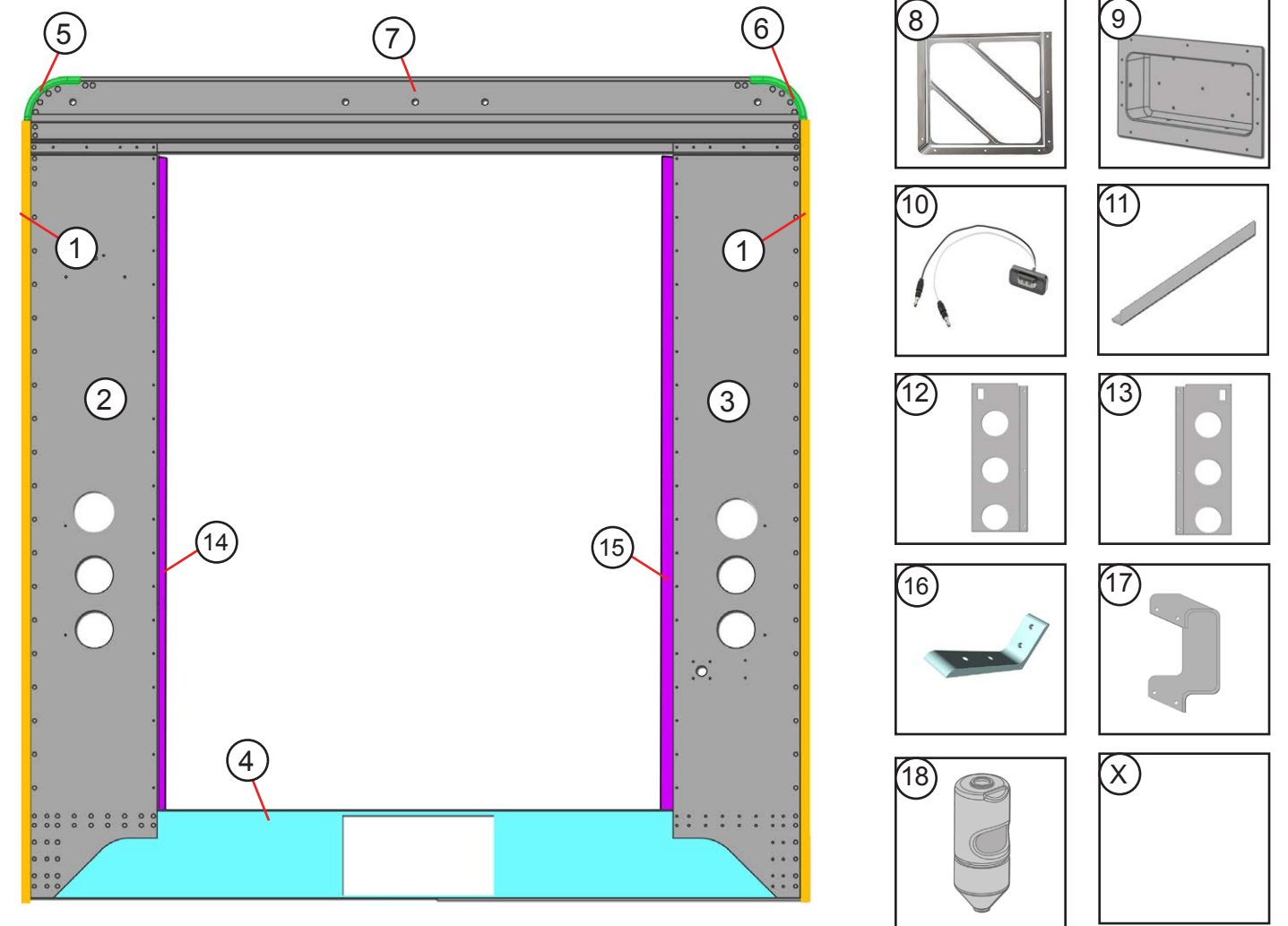
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1	095031410	BEAM @ O/LINE AL 450408X84.25	1	EA
2	003330525	ANGLE STEP 450187X34	1	EA
FLOOR FORWARD				
3	095031494	BEAM FLOOR RIB ALE450583X84.25	1	EA
4	095031442	BEAM FLOOR RIB ALE450586X84.25	2	EA
5	095031426	BEAM FLOOR RIB ALE450586X87.25	4	EA
6	095031451	BEAM FLOOR RIB ALE450584X87.25	1	EA
7	095031476	BEAM FLOOR RIB ALE450587X87.25	1	EA
8	095031424	ANGLE FLOOR AT DR ALE450303X35.75	1	EA
9	095031419	ANGLE FLOOR 2DR ALE450303X45.75RH	1	EA
10	095031422	ANGLE FLOOR DLH ALE450303X82	1	EA
FLOOR MID				
11	155032407	BEAM FLOOR AL450586X49.26	4	EA
12	155032406	BEAM FLOOR AL450585X49.26	1	EA
13	095032425	ANGLE W/BX ATTACH ALE450018X44	2	EA
14	155032202	W/BX ASSEMBLY 88W 44"	2	EA
FLOOR REAR				
15	095031476	BEAM FLOOR RIB ALE450587X87.25	1	EA
16	095031426	BEAM FLOOR RIB ALE450586X87.25	2	EA
17	095031451	BEAM FLOOR RIB ALE450584X87.25	1	EA
18	095033416	BEAM RIB FLOOR ALE450583X87.25	1	EA
19	155033402	PLATE FIL RR AL.125X4.45X87.38	1	EA
20	45059202	DROP SILL AL FLOOR 1.88X87.5	1	EA
21	155033403	ANGLE FLOOR AL450303X46.19	2	EA
ACCESS DOOR				
22	40900082	SPRING	4	EA
23	40900080	STUD	8	EA
24	40900081	GROMMET HALF	8	EA
25	125012400	SUPPORT ACCESS DOOR AL .125X12.22X17.59	1	EA
26	130032200	DOOR ACCESS WELDMENT	1	EA
27	150012400	ANGLE SUPPORT ACCESS DOOR AL450187X29	2	EA



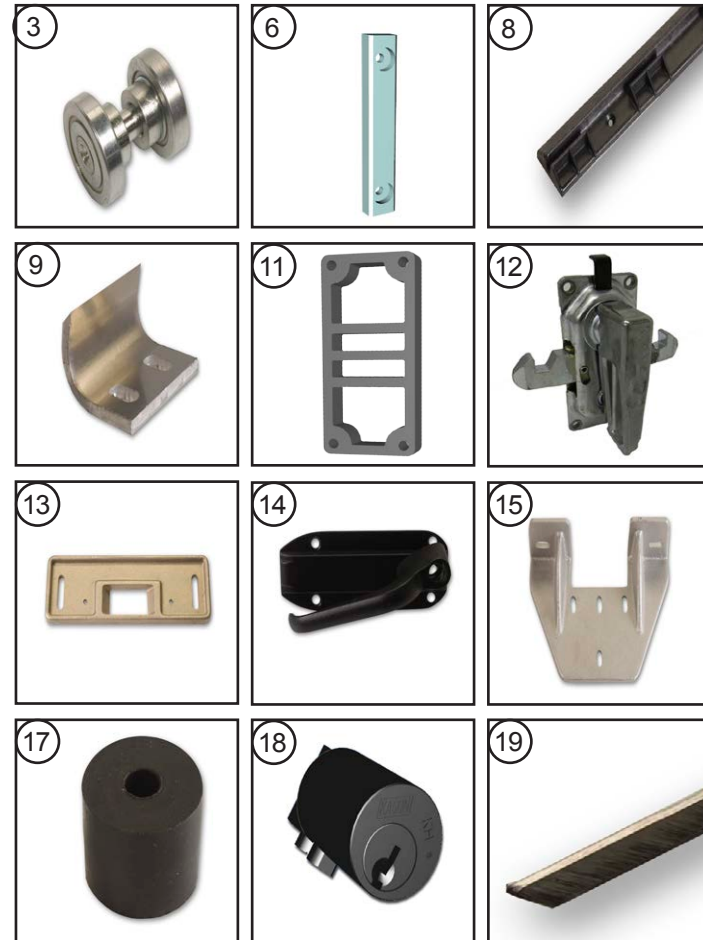
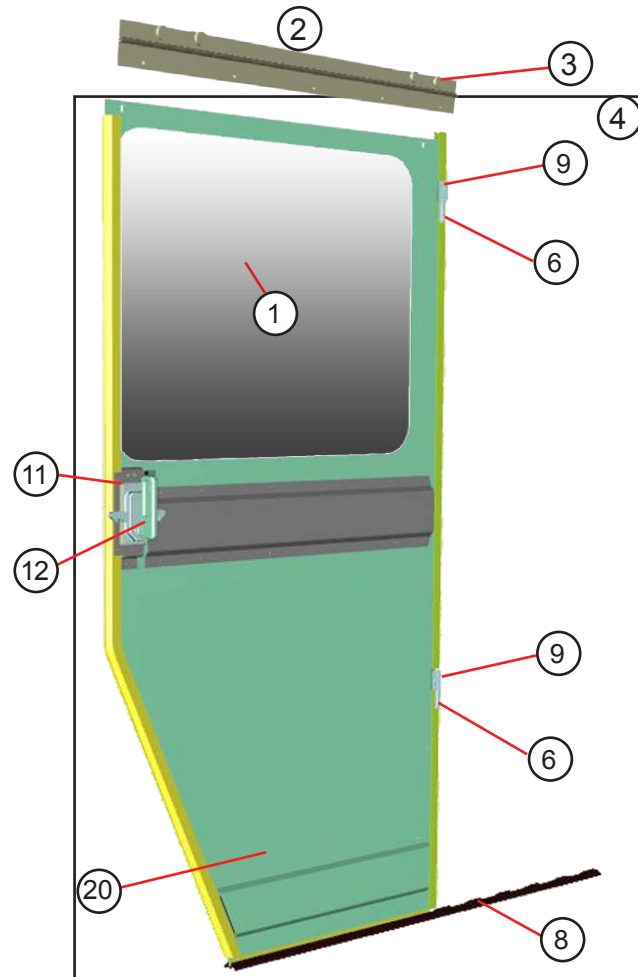
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	155046405	SIDE UPPER AL .102X56X218.31 DLH	1	EA
2	155045406	SIDE LOWER AL .102X32X218.31 DLH	1	EA
3	095044405	DOOR POST TOP AL 456110X58.93 LH	1	EA
4	095044406	DOOR POST BOTTOM AL 456110X34.68 DLH	1	EA
5	155039403	RUB RAIL AL 450002X214.31 DLH	1	EA
6	1100799	END CAP RR FL AL.125X2.37X5.5	4	EA
7	1100800	END CAP FORWARD AL .125X2.37X5.5	2	EA
8	7600165	PLATE FILLER RUB RAIL AL.125X2.88X3	2	EA
9	47008545	VENT AL 2WAY HNGLS	1	EA
10	47008548	GASKET FOR VENT	1	EA
17	155039401	RUB RAIL LOWER REAR AL450002X44	1	EA
19	155039405	RUB RAIL LOWER FRONT AL 450002X97.75	1	EA
11	155038419	SIDE UPPER AL .102X56X177.31 RH	1	EA
12	155037409	SIDE LOWER AL .102X32X177.31 RH	1	EA
7	1100800	END CAP FORWARD AL .125X2.37X5.5	2	EA
13	155039402	RUB RAIL AL 450002X173	1	EA
14	095038404	POST "B" AL 450274X90.18 RH	1	EA
8	7600165	PLATE FILLER RUB RAIL AL .125X2.88X3	1	EA
6	1100799	END CAP REAR FL AL .125X2.37X5.5	4	EA
15	083042401	STIFFENER HEADER AL 450328X73.75 RH	1	EA
16	96742302	CLIP AL Z .102X3X9.57	1	EA
17	155039401	RUB RAIL LOWER REAR AL450002X44	1	EA
30	155039404	RUB RAIL AL 450002X71.5	1	EA
18	45800103	WINDOW SLIDING RH	1	EA
20	45800102	WINDOW SLIDING LH	1	EA
NS	093019408	STIFFENER ZEE BELOW WINDOW LH AL.07X7.59X16.19	1	EA
23	998512001	FUEL FILL RISER	1	EA
24	095026407	SPLASH PAN AL .125X12.33X16.49 LH	1	EA
25	113026401	ADAPTOR SPLASH PAN AL .125X3.17X14.15 RH	1	EA
26	115026406	S/PN AL.125X15.64X16.73RH	1	EA
27	155026404	SPLASH PAN F/FIL AL .07X17.5X31.03	1	EA
28	003711425	GUARD VENT AL .102X14.11X19.37	1	EA
29	001744400	GUSSETT FLOOR TO SIDE	3	EA
30	44003020	FENDER FLARE	2	EA
NS	093019417	PANEL LNR BELOW WINDOW LH AL.102X31.57X38.46DLH	1	EA
NS	155019402	PANEL LNR ABOVE WINDOW DLH AL.07X23.11X45.35	1	EA
NS	093019413	PANEL LNR ABOVE WINDOW AL .07X15.48X44.17 RH	1	EA



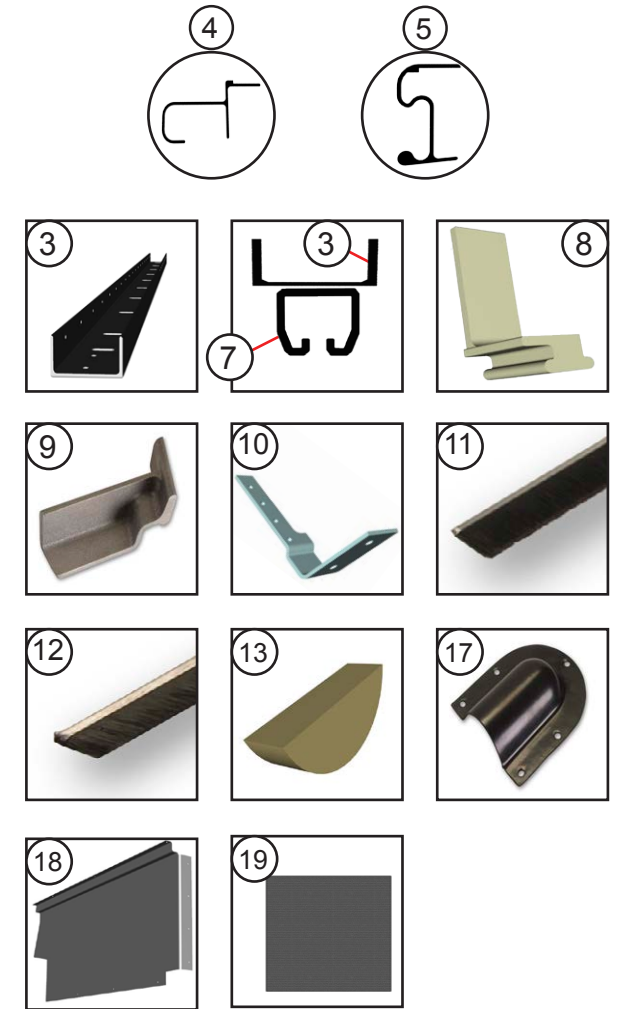
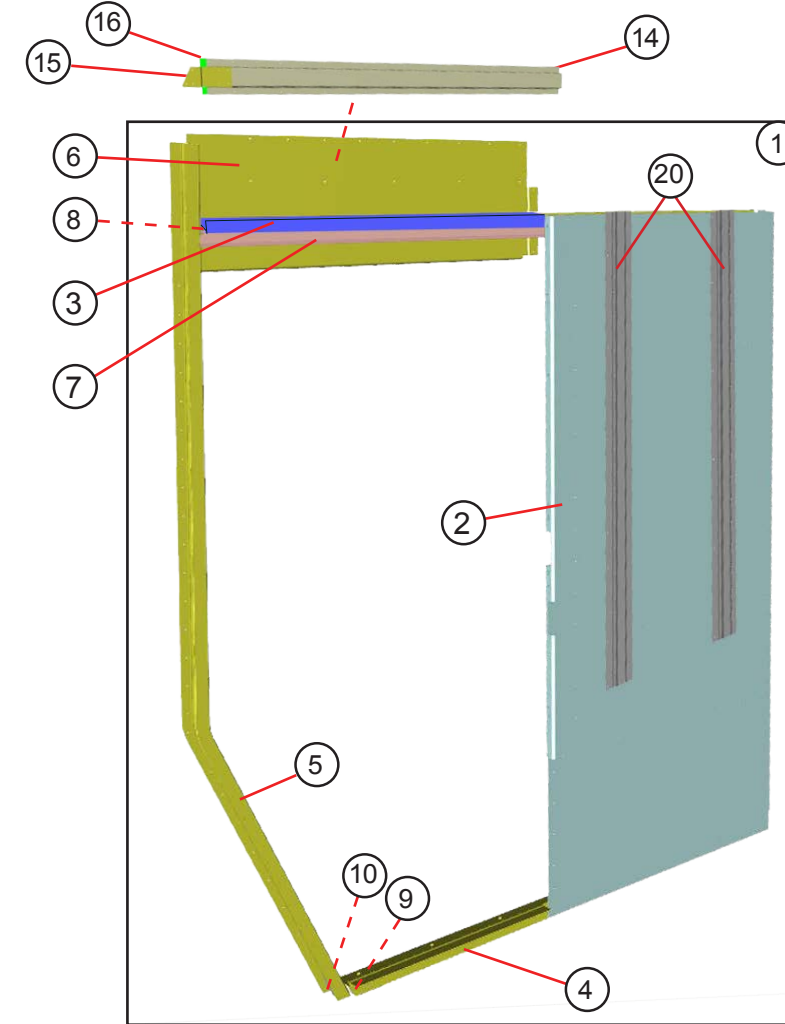
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	155010006	ROOF ASSEMBLY 14' 88W	1	EA
2	45601604	ROOF BOW STEEL 16GA SEC456016 X89.12	9	EA
3	098010403	ROOF RAIL 14' 456144X213.25 ROADSIDE	1	EA
4	098010404	ROOF RAIL 14' 456144X213.25 CURBSIDE	1	EA
5	088010508	RAIL INTERLOCK AL 450140X213.25 ROADSIDE	1	EA
6	088010509	RAIL INTERLOCK AL 450140X213.25 CURBSIDE	1	EA
7	118010400	ROOF BEAM @ O LINE	1	EA
8	077100400	CORNER CASTING ROADSIDE	1	EA
9	077100401	CORNER CASTING CURBSIDE	1	EA
10	001710407	NOSE ROOF INTERLOCK	1	EA
11	001710408	ROOF INTERLOCK TRANSOM	1	EA
12	083010401	ROOF NOSE AL 456107X77.5	1	EA
13	155011400	ROOF LINER FIBERGLASS	1	EA
14	47006610	CLIP PLASTIC FLAT HEAD	56	EA
NS	45200847	ROOF SKIN FBG .075X77XFT	17.86	FT
16	1114110	VENT ROOF 80CFM	1	EA
17	1114150	VENT REGULATOR 20.3cm	1	EA
18	7909009	PLATE REINFORCEMENT VENT AL .07X26.75X27.75	1	EA
NS	47012700	SPACER RING VENT	1	EA



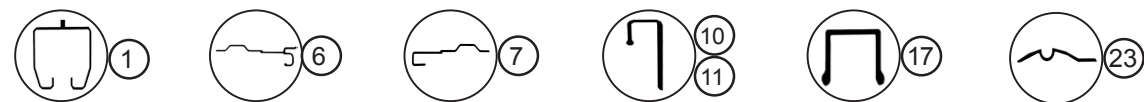
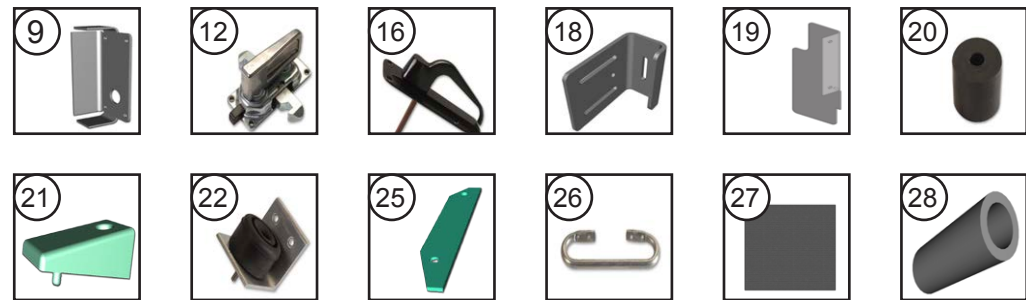
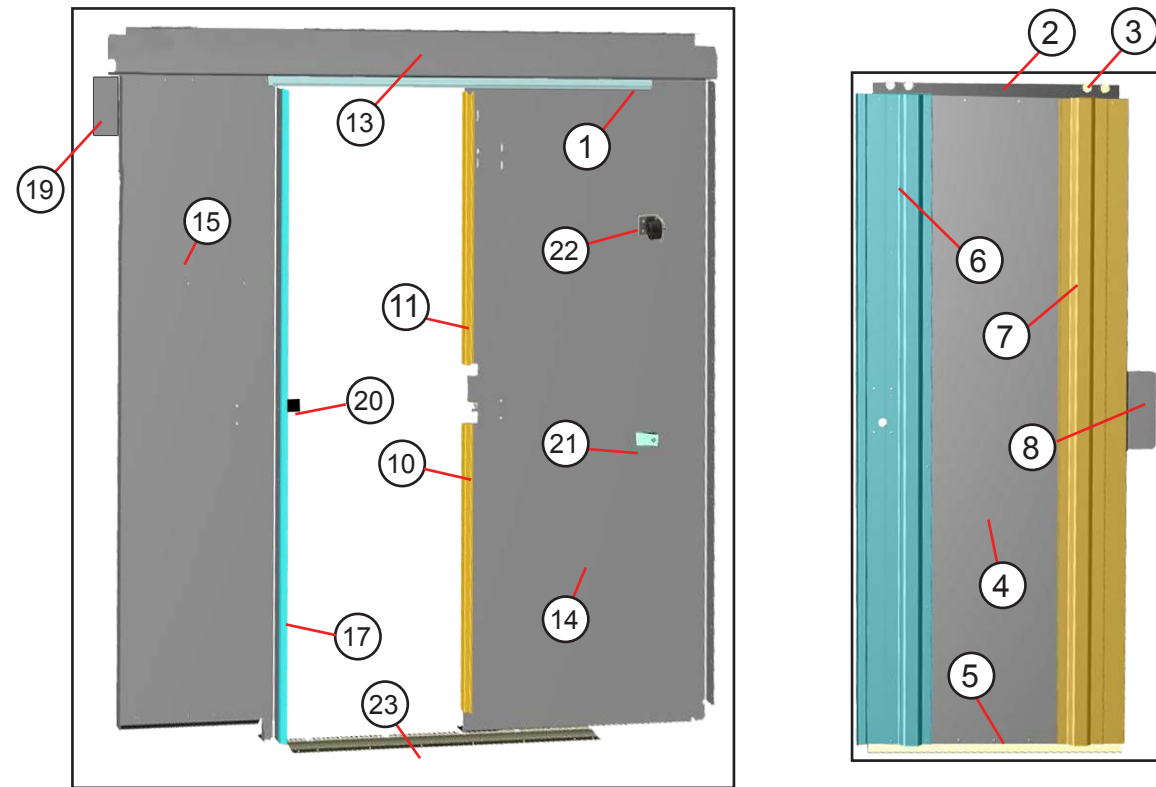
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	083053452	CHANNEL POST CORNER AL 450359X88.69	2	EA
2	155053402	PANEL BACK AL .102X12.63X86.04 LH	1	EA
3	155053403	PANEL BACK AL .102X12.63X86.04 RH	1	EA
4	083053607	SILL REAR 93W AL 450024X84	1	EA
5	45100009	CORNER CAST LH	1	EA
6	45100010	CORNER CAST RH	1	EA
7	083053454	TRANSOM HEADER REAR RUD AL 450266X86.62	1	EA
8	43001401	PLACARD HOLDER	4	EA
9	140092400	BOX LICENSE PLATE	1	EA
10	47009642	LAMP MARKER CLEAR	1	EA
11	79885033	ANGLE SUPPORT LICENSE PLATE 450184X21.56	1	EA
12	155081400	GUARD T/L AL.07X12.81X29.24 LH	1	EA
13	155081401	GUARD T/L AL.07X12.81X23.37 RH	1	EA
14	97024200	JAMB DOOR POST ASSEMBLY LH	1	EA
15	97024201	JAMB DOOR POST ASSEMBLY RH	1	EA
16	90650309	ANGLE CLIP AL 450192X.88	2	EA
17	7400214	BRACKET SPACER DOOR AL 1126509X4	1	EA
18	47009530	DRAIN CHAMBER	2	EA



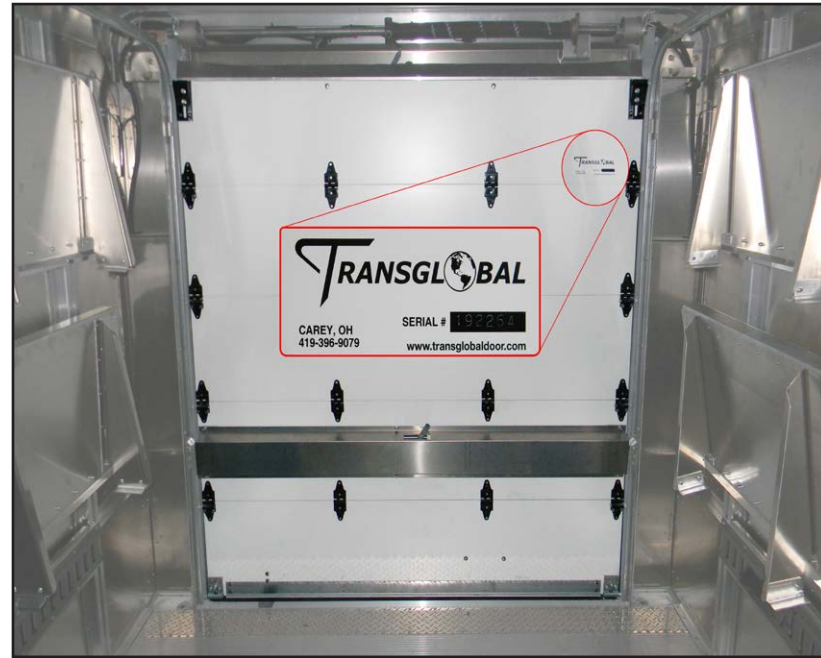
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	45800102	WINDOW SLIDING RH	1	EA
2	96760203	HANGER ASSEMBLY (INCLUDES BEARINGS & BRUSH SEAL 44008050)	1	EA
3	47006595	BEARING SR311-214 & RT311-278	4	PR
4	115060202	SIDE DOOR ASSEMBLY	1	EA
5	98760306	WEATHER STRIP D/S 450008X25.75	1	EA
6	45200206	SPACER ANTI RATTLE NYLON	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 AL.188X2X2.7	2	EA
10	44004104	SEAL RUBBER RS FORWARD	1	EA
11	087181	KASON SPACER (ADDITIONAL SPACER 157060404)	1	EA
12	1113016	LATCH	1	EA
13	45100093	STRIKER BRONZE CAST D/S RR	2	EA
14	47001326	HANDLE SIDE BLACK	1	EA
15	45100094	BRACKET STRIKER	1	EA
13	45100163	STRIKER BRONZE CAST D/S RR	1	EA
17	44002011	RUBBER BUMPER	1	EA
18	47001194	CYLINDER HANDLE REMOVABLE	1	EA
19	44008050	SEAL BRUSH TYPE B 1X41.95"	1	EA
20	115060409	PANEL LOWER DOOR AL.07X 39.4X35.45	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
2	155041406	PANEL DOOR POCKET AL .102X42.27X82.08 RH	1	EA
3	96741303	CHANNEL HEADER AL 450256X75 RH	1	EA
4	095041416	NOSE STEP AL 450247X62.57 RH	1	EA
5	095041410	DOOR POST AL 450294X92.77 RH	1	EA
6	155041405	PANEL HEADER AL .102X14X42.34 RH	1	EA
7	96741202	TRACK ASSEMBLY UPPER	1	EA
8	45100049	GUSSET HEADER CHANNEL TO DOOR POST	1	EA
9	45100105	DOOR POST CASTING LOWER	1	EA
10	001741408	REINFORCEMENT BRACKET AL.125X1.53X8.04 RH	1	EA
11	44004060	SEAL BRUSH TYPE C 1.5X82	1	EA
12	44008050	SEAL BRUSH TYPE B 1X83.9	1	EA
13	45900001	PLUG WD RUBRAIL .75X1.12X2.9	1	EA
14	083042401	STIFFENER HEADER AL450328X73.75 RH	1	EA
15	96742302	CLIP AL Z .102X3X9.57	1	EA
16	45100074	CAP RAIL END (OPTIONAL)	1	EA
17	47008533	VENT CAP PLASTIC (OPTIONAL)	1	EA
18	123019405	PANEL LINER HEADER AL.07X19.48X50.57 RH	1	EA
19	47009600	CARPET GREY BLACHFORD	2	FT
20	155048418	STIFFENER AL 459919X66.75	2	EA
NS	158041201	DRIP EDGE WELDMENT ASSEMBLY	1	EA



ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	005770200	TRACK DOOR ASSEMBLY	1	EA
2	088070206	HANGER ASSEMBLY W/SEAL	1	EA
3	47006595	BEARING ASSEMBLY	4	PR
4	088070425	PANEL DOOR BULKHEAD AL .125X24.27X73.2	1	EA
5	088070434	WEAR STRIP BHD 452002X28.75	1	EA
6	088070419	BULKHEAD EDGE AL 450504X73.26 CURBSIDE	1	EA
7	088070418	BULKHEAD EDGE AL 450504X73.26 ROADSIDE	1	EA
8	088070478	PLATE FILLER BHD AL.07X4.94X9	1	EA
9	088070433	SPACER DOOR BHD AL .125X4.6X10.02	1	EA
10	088070436	CHANNEL BHD LOWER AL 450502X33.25	1	EA
11	088070437	CHANNEL BHD UPPER AL 450502X31.66	1	EA
12	1113016	LOCK MECH INNER D/S KAS 4002-14	1	EA
13	150070406	HEADER BHD ZEE AL .102X8.8X87.4	1	EA
14	150070405	PANEL BHD AL .102X34.84X77.38 LH	1	EA
15	150070404	PANEL BHD AL .102X24.87X77.38 RH	1	EA
16	47001329	HANDLE DOOR BLACK POWER COAT NON LOCKING	1	EA
17	96770312	JAMB AL 450326X74.37	1	EA
18	088070431	BRACKET STRIKER STEEL 7GAX3.5X6.32 LH	1	EA
19	088070442	PLATE BHD FILLER AL .055X3.65X8.29 RH	1	EA
20	44002011	BUMPER RUBBER A/I #0021W	1	EA
21	45200208	DOOR CHOCK NYLON	1	PR
22	5903152	DOOR STOP ASSEMBLY	1	EA
23	96770316	GUIDE DOOR FLOOR AL 450414X47.88	1	EA
24	130070407	ANGLE REINFORCEMENT STL12GAX5.29X23.5	1	EA
25	06M202043	SHIM HANDLE	1	EA
26	90187300	GRAB HANDLE .5 DIA	1	EA
27	47009600	CARPET BULKHEAD	18.5	FT
28	088070482	SPACER BULKHEAD 1101200X1.75	2	EA

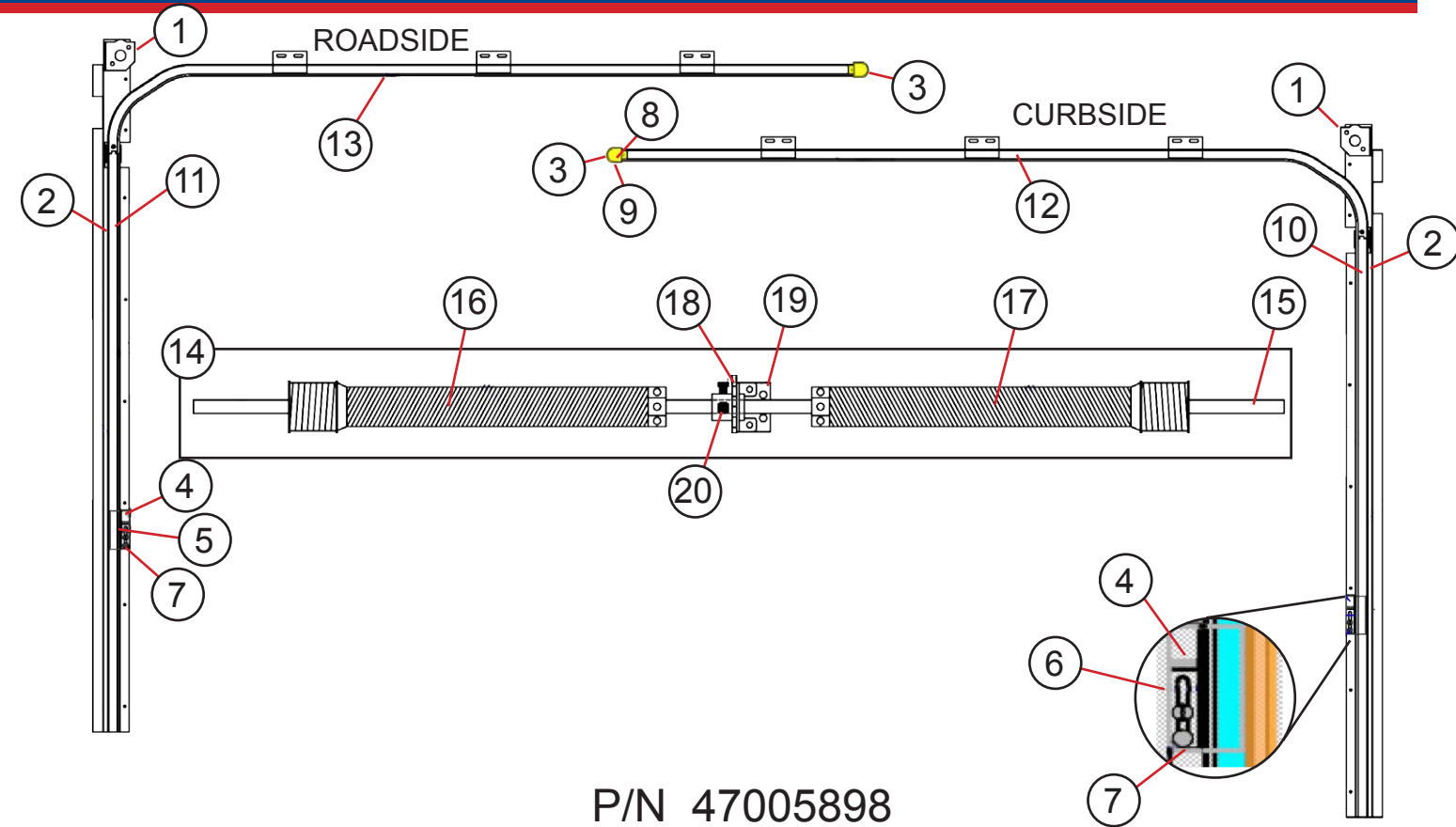
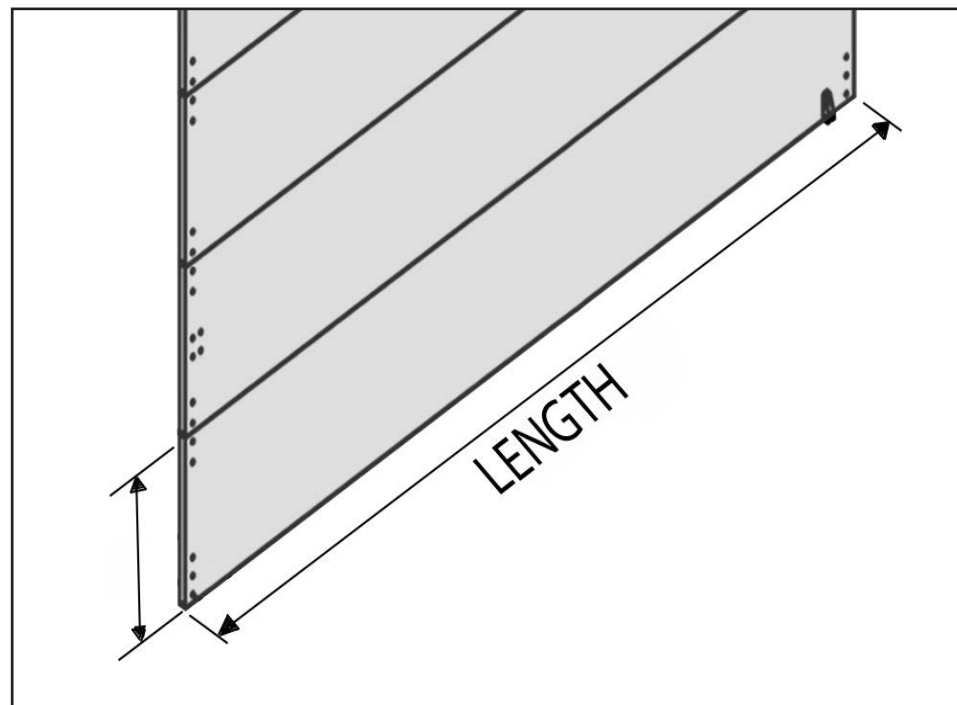


ROLL-UP DOOR SERIAL NUMBER LOCATION

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.

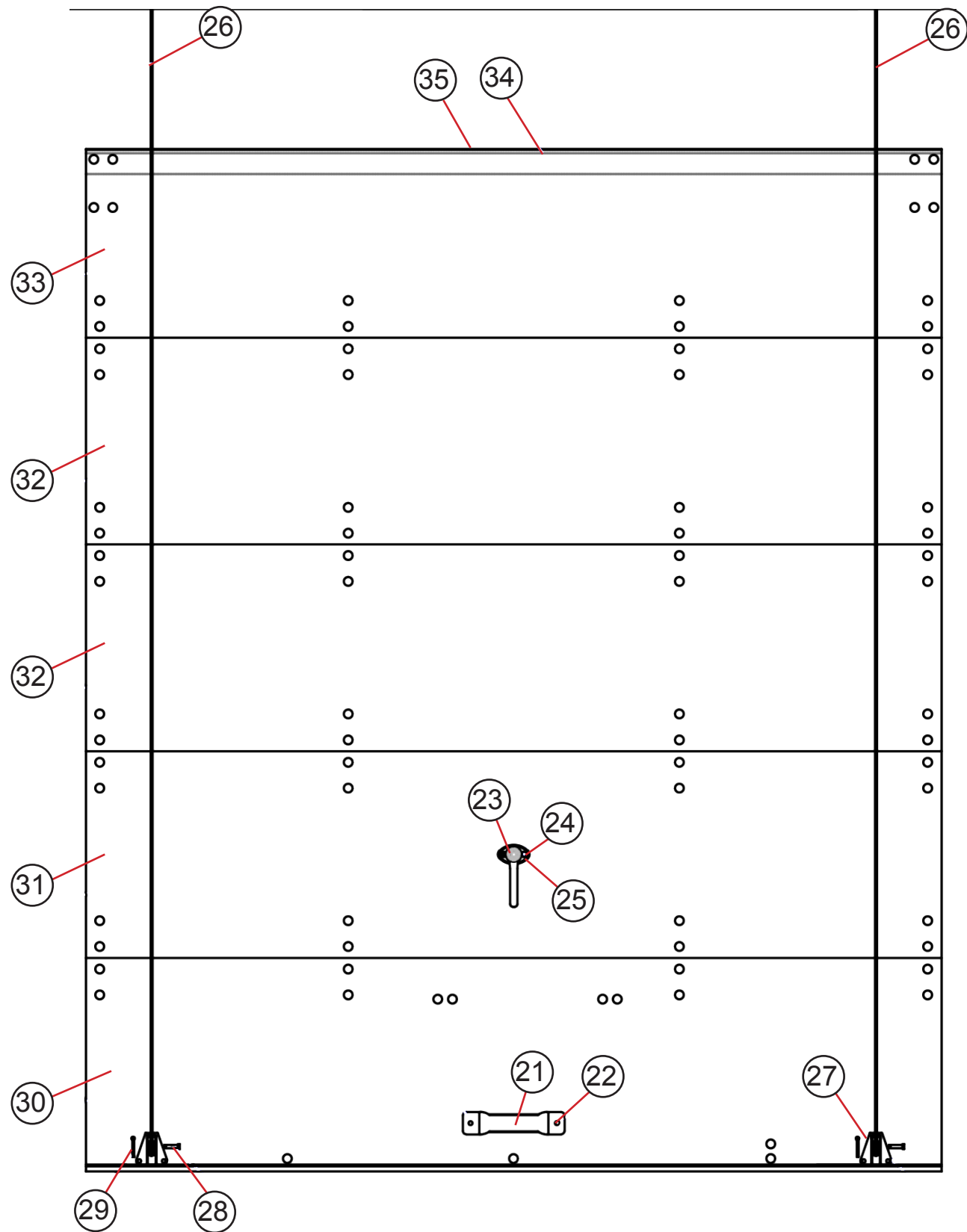
IN THE EVENT OF A DAMAGED, UN-READABLE OR MISSING SERIAL NUMBER,
PLEASE TRY TO PROVIDE THE COMPOSITION DETAILS OF THE DOOR PANEL.
(PLASTIC PANEL (WEATHERTITE), ALUMINUM CLAD, PLYWOOD, ETC.)



P/N 47005898

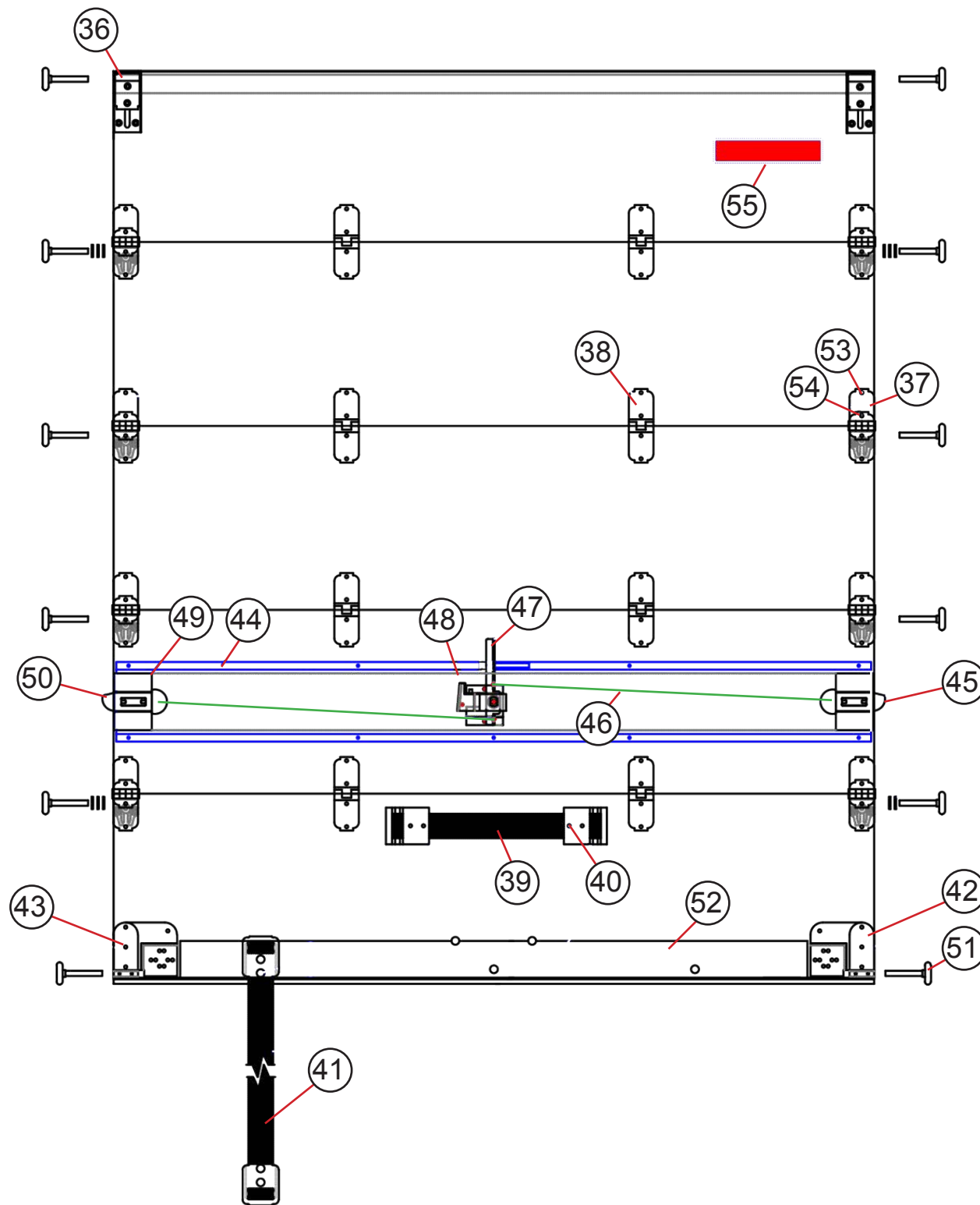
ITEM#	PART#	DESCRIPTION
1	47106737	BEARING ASSEMBLY
2	47106594	SIDE SEAL ASSEMBLY
3	47106739	HEAD PROTECTOR YELLOW
4	47106740	LOCK CATCH
5	47106759	CATCH MOUNTING PLATE - LH (CS)
6	47106758	CATCH MOUNTING PLATE - RH (RS)
7	47106744	5/16" -18 KEEP NUT
8	47106745	1/4 -20 X 1-3/4" HEX HEAD BOLT
9	47106746	1/4-20 KEEP NUT
10	47106816	VERTICAL TRACK ASSEMBLY CURBSIDE
11	47106817	VERTICAL TRACK ASSEMBLY ROADSIDE
12	47106814	HORIZONTAL TRACK ASSEMBLY CURBSIDE
13	47106815	HORIZONTAL TRACK ASSEMBLY ROADSIDE
Counterbalance Assembly		
14	47106818	COUNTER BALANCE ASSEMBLY
15	47106819	COUNTERBALANCE SHAFT - 61"
16	47106820	SPRING .156 X 2 3/16 X 17 (LH) C
17	47106821	SPRING .156 X 2 3/16 X 17 (RH) C
18	47106822	TORSIONER, MOQ 500 (TG-WINDER)
19	47106823	BASE PLATE, TORSION WINDER BASE PLATE
20	47106824	SINGLE SPRING OPERATOR ASSEMBLY

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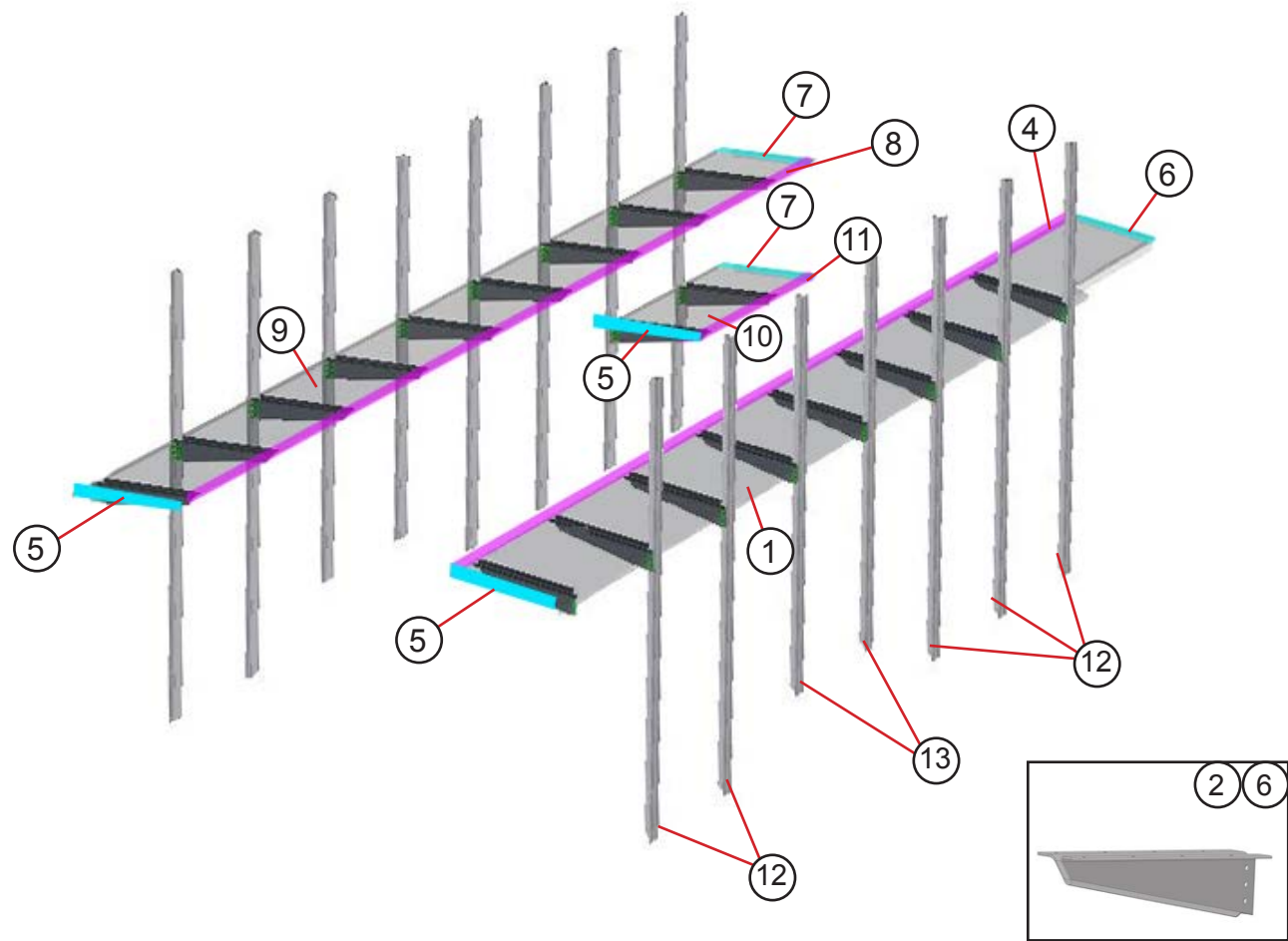


ITEM #	PART #	DESCRIPTION
21	47106796	LIFT HANDLE - BLACK
22	47106813	1 3/8" STAINLESS STEEL RIVET
23	47106774	L-HANDLE, NON-KEYED
24	47106803	10-24 X 1 1/4" SS SCREW
25	47106784	10-24 SS NYLOK
26	47106727	95" 7 X 19 SS CABLE 1/4" METAL EYE
27	47106762	BUTTERFLY CABLE ANCHOR BRACKET
28	47106706	CABLE ANCHOR BRACKET PIN
29	47106719	COTTER PIN
30	47106809	PANEL BOTTOM INSULATED PVC COMPLETE
31	47106810	PANEL LATCH INSULATED PVC COMPLETE
32	47106811	PANEL INTERMEDIATE INSULATED PVC
33	47106812	PANEL TOP INSULATED PVC COMPLETE
34	47003621	TOP PANEL SEAL RETAINER
35	47009914	TOP PANEL SEAL - STANDARD

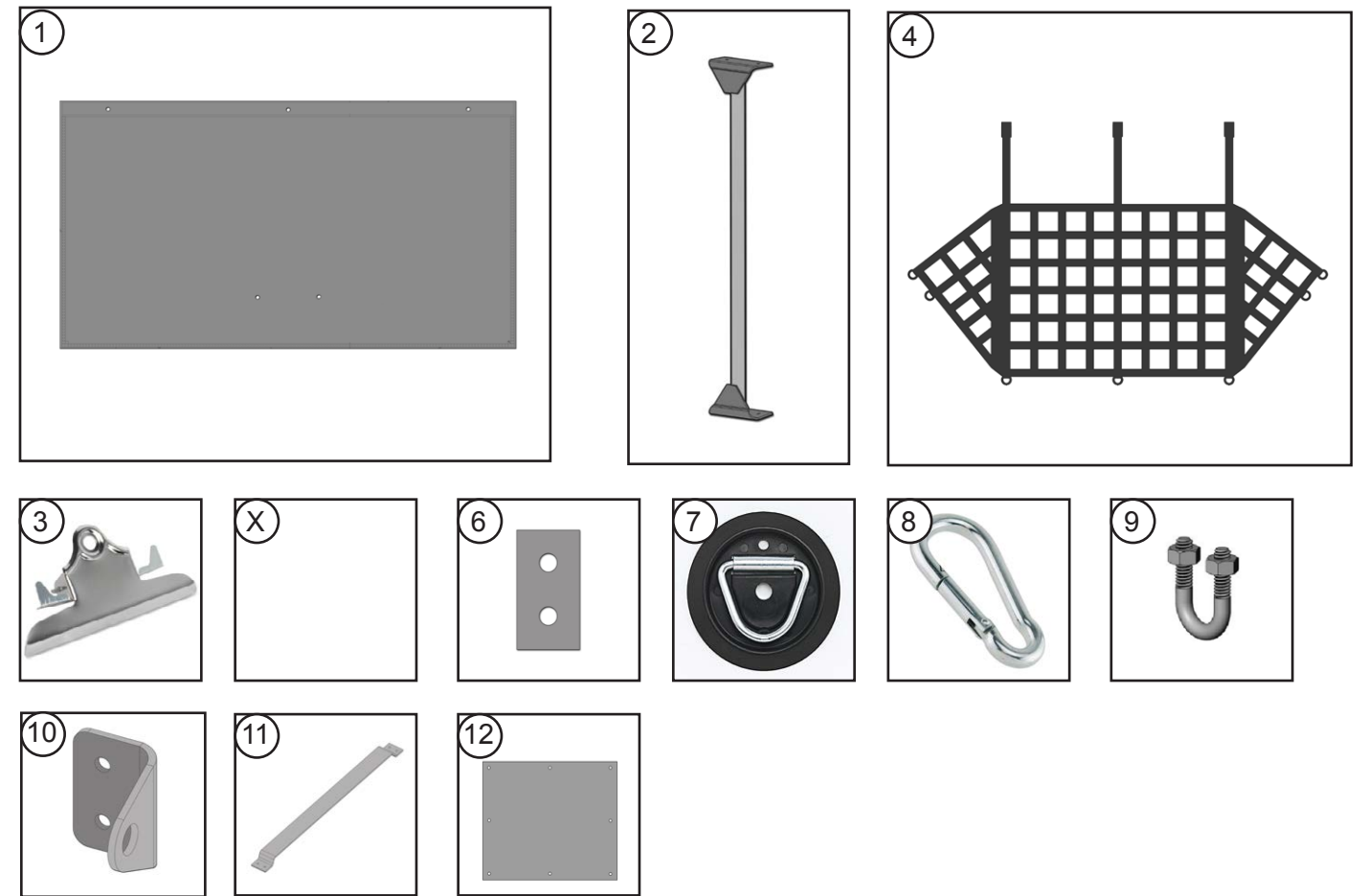
P/N 47005898



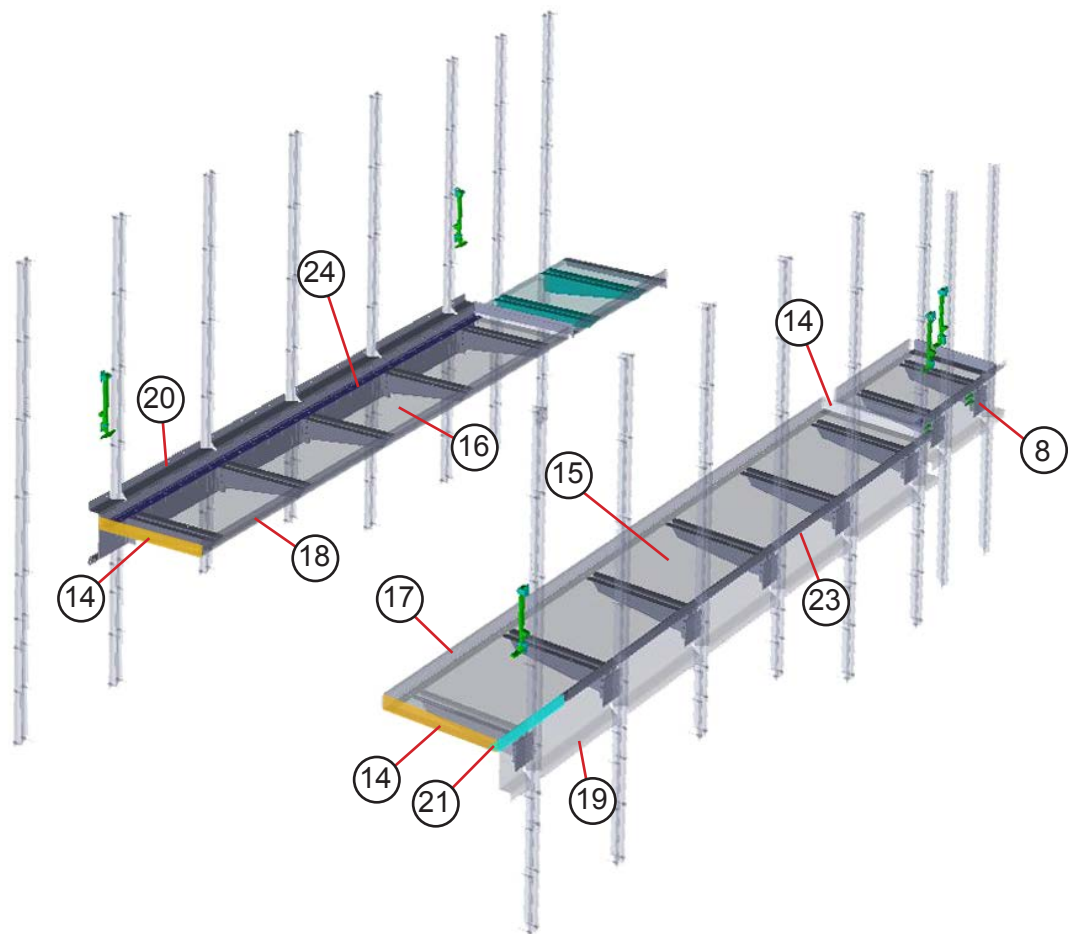
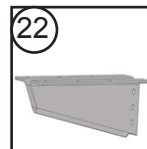
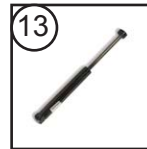
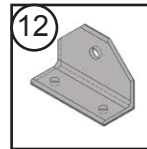
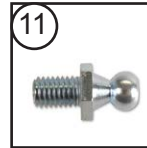
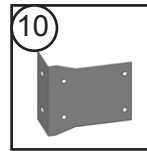
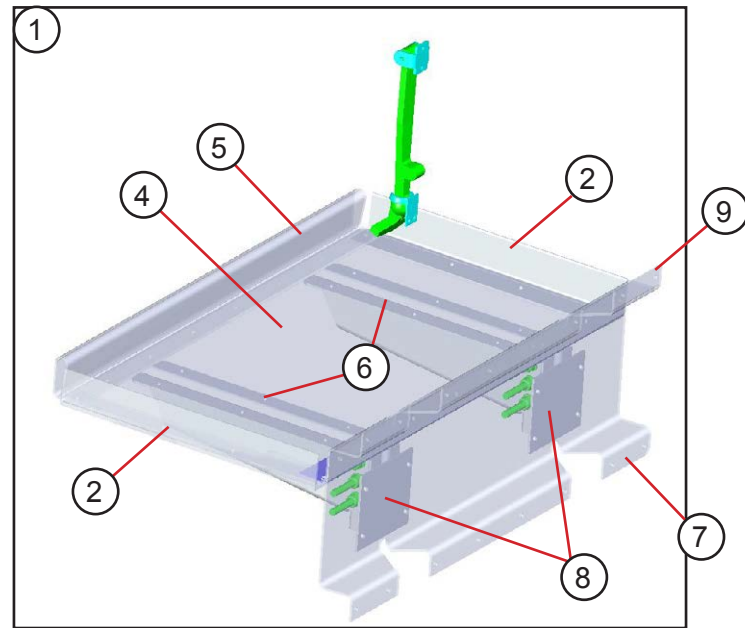
ITEM #	PART #	DESCRIPTION
36	47106801	TOP CLOSURE COMPLETE
37	TG-69035	END HINGE
38	TG-61196	CENTER HINGE
39	47106728	12" PULL STRAP, NO LOOP - 2 BLACK RETAINERS
40	47009944	1-1/8" STAINLESS STEEL RIVET
41	47106802	60" PULL STRAP, NO LOOP - 2 BLK RETAINERS
42	47003694	HD BOTTOM FIXTURE ASSEMBLY - RS
43	47003685	HD BOTTOM FIXTURE ASSEMBLY - CS
44	47106804	CABLE COVER W/ STUDS - 62" LENGTH
45	47106717	END LATCH - RS
46	47106860	CABLE ASSEMBLY, 2 PT LOCK W/ 2 STOPS & WASHER
47	47106712	CENTER CONTROL
48	47106805	LOCK COVER BASE CENTER
49	47106806	LOCK COVER BASE END
50	47106716	END LATCH - CS
51	47106807	1" PREMIUM NYLON ROLLER
52	47106808	BOTTOM ANGLE FOR .75"
53	47009943	1" STAINLESS STEEL RIVET
54	47106813	1 3/8" STAINLESS STEEL RIVET
55	CALL	DATA TAG LOCATION - MODEL & SERIAL NUMBER
NS	47003147	BELTED RUBBER SIDE SEAL 75"
NS	47000839	HEADER SEAL ASSEMBLY - 60"



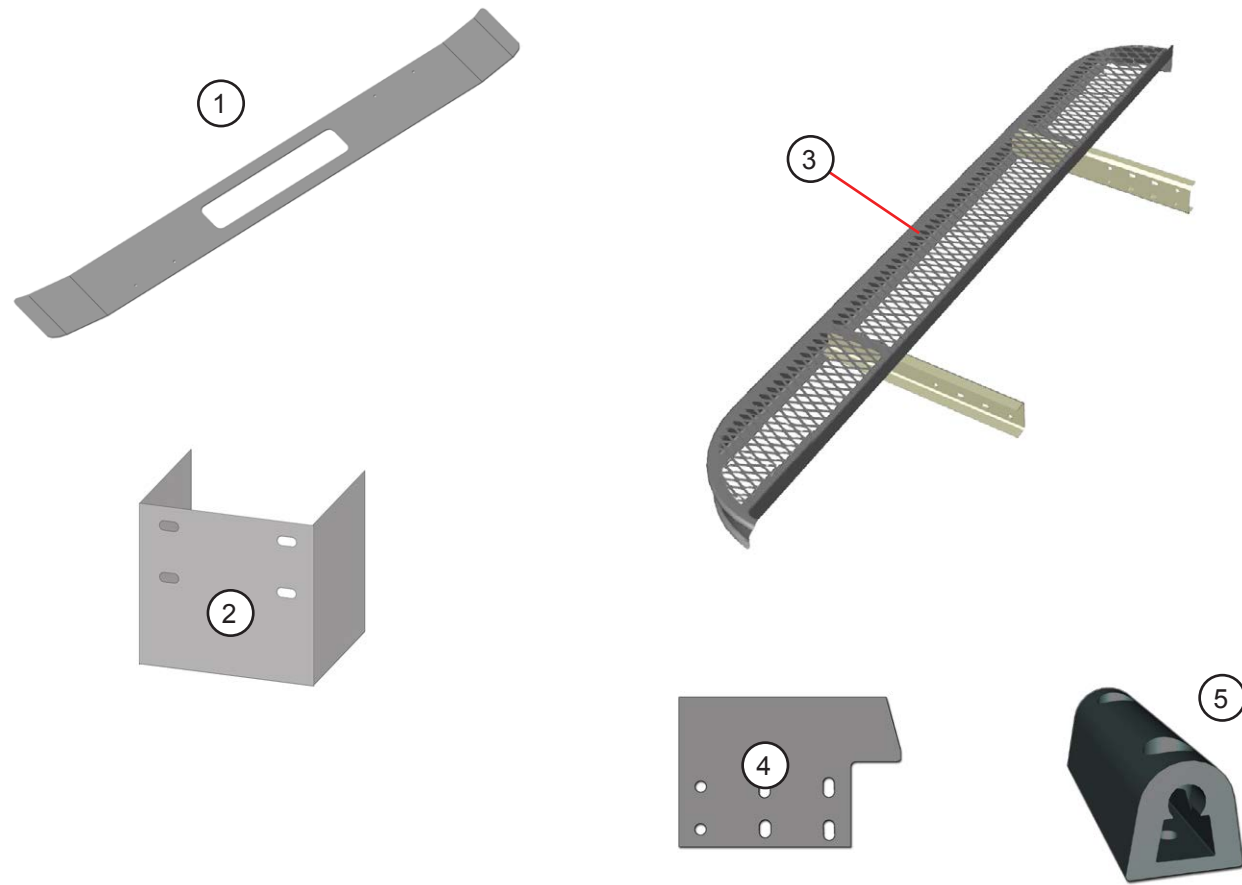
ITEM#	PART#	DESCRIPTION	QTY.	UNIT
1	155105415	PANEL SHELF AL .102X21.27X166.38 RH	1	EA
2	155105421	ARM SHELF AL.125X10.19X17.01	2	EA
3	003779410	ARM SHELF AL .125X10.45X20.02	6	EA
4	155105419	LIP SHELF AL450589X166.5	1	EA
5	155105417	ANGLE SHELF FXD RR AL450523X19.5	1	EA
6	155105420	ANGLE SHELF FXD BHD AL450180X17	1	EA
7	155105418	ANGLE SHELF FXD BHD AL450180X20	1	EA
3	003779410	ARM SHELF AL .125X10.45X20.02	7	EA
5	155105417	ANGLE SHELF FXD RR AL450523X19.5	1	EA
8	155105416	LIP SHELF AL450589X142.38	1	EA
9	155105414	PANEL SHELF AL .102X21.27X142.38	1	EA
10	155105422	PANEL SHELF AL.102X21.27X31.75 L	1	EA
5	155105417	ANGLE SHELF FXD REAR AL450523X19.5	1	EA
11	155105423	LIP SHELF AL450589X31.75	1	EA
7	155105418	ANGLE SHELF FXD BHD AL450180X20	1	EA
5	003779410	ARM SHELF AL .125X10.45X20.02	2	EA
12	155048411	STIFFENER 81H T-STUD AL 459919X75.25	10	EA
13	155048412	STIFFENER 81H T-STUD AL 459919X65.75	4	EA



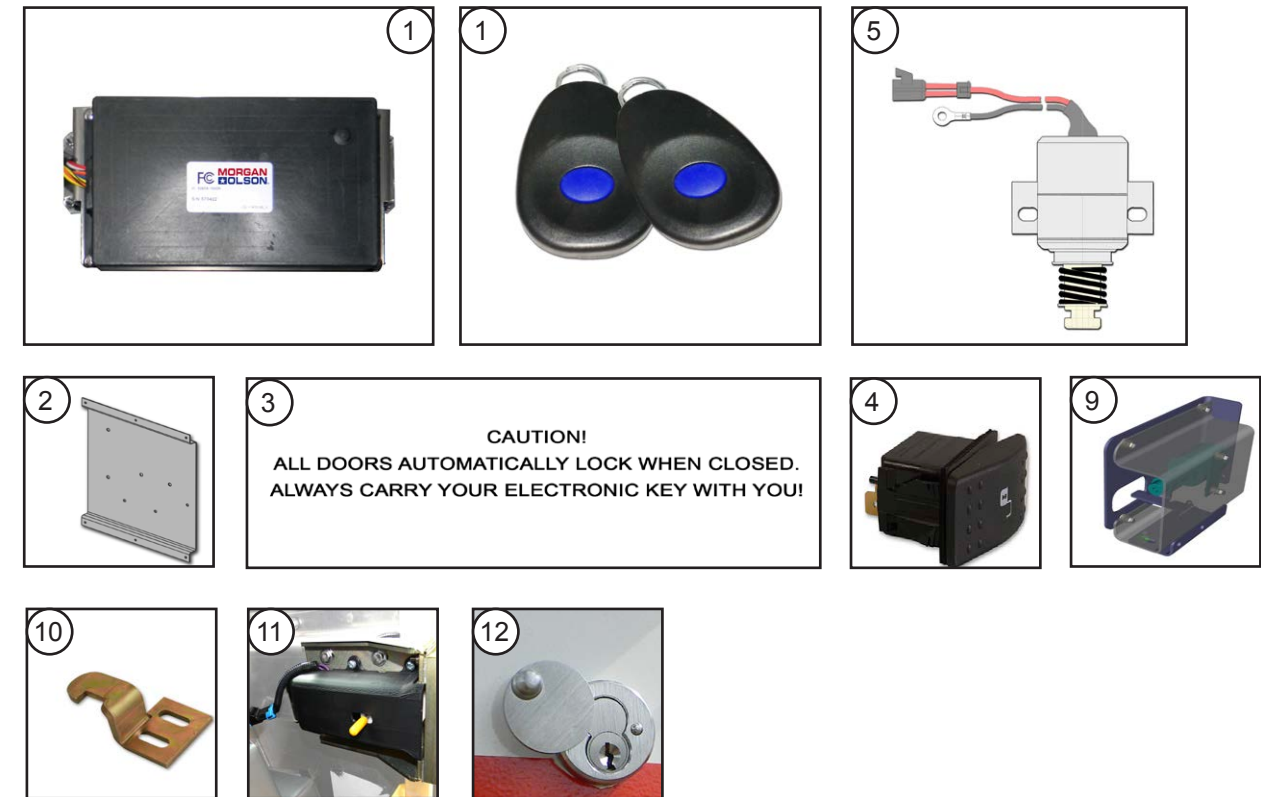
ITEM#	Part#	Description	QTY.	UNIT
1	083014200	SHELF ASSEMBLY CAB WORK TABLE (optional)	1	EA
2	103014200	LEG SHELF WELDMENT ASSEMBLY (optional)	1	EA
3	47006088	CLIP WORK TABLE (optional)	2	EA
4	47009297	CARGO NET W/ 1" D RINGS	1	EA
NS	150127457	SUPPORT CARGO NET AL.125X5.23X51.21	1	EA
6	150127458	SPACER AL.188X1X1.81	3	EA
7	47006020	TIE DOWN RING	5	EA
8	47009294	CONNECTOR	5	EA
9	47009298	U - BOLT	3	EA
10	150127456	BRACKET HAND CART BUNGEE STEEL 11GAX2X2.86	1	EA
11	150127455	BRACKET HAND CART AL.125X2X23.51	1	EA
12	150127462	PANEL WEAR HAND CART AL .102X10X12	1	EA



ITEM	PART #	DESCRIPTION	QTY.	UNIT
1	155106208	SHELF A D/PKT FLD T-STUD&CYCL	1	EA
2	155106412	ANGLE SHELF FOLDING 450523X14.75	2	EA
3	155106413	STANTION SHELF AL459919X4.5	2	EA
4	155106409	PANEL SHELF D/P AL.07X14.75X27.75	1	EA
5	155106411	LIP SHELF AL450589X27.75	1	EA
6	155106402	ARM SHELF AL.125X10.19X14.01	2	EA
7	155106408	HORIZ HAT AL.125X13.16X27.75	1	EA
8	125105408	SHIM AL.125X4X4.75	1	EA
9	155106410	HINGE SHELF 47007796X27.5	1	EA
10	155106428	CYLINDER SUPPORT SHIM AL.125X4.75X6.48	1	EA
11	47006086	STUD BALL .31-18	2	EA
12	155106429	CYLINDER SUPPORT AL450188X3	1	EA
13	47006119	SPRING GAS 50LB 12/8.5	1	EA
14	155106417	ANGLE SHELF AL450523X17.75	4	EA
15	155106416	PANEL SHELF AL .07X17.75X132.75 RH	1	EA
16	155106420	PANEL SHELF AL .07X17.75X108.75 LH	1	EA
17	155106418	LIP SHELF 450589X132.75	1	EA
18	155106422	LIP SHELF AL450589X108.75	1	EA
19	155106414	HORZ HAT AL.125X13.16X132.75	1	EA
20	155106419	HORZ HAT AL.125X13.16X108.75	1	EA
8	125105408	SHIM AL.125X4X4.75	5	EA
3	155106413	STANTION SHELF AL459919X4.5	6	EA
21	155106415	HINGE SHELF 47007796X17.38	1	EA
22	155105421	ARM SHELF AL.125X10.19X17.01	11	EA
13	47006166	SPRING GAS 90LB 12/8.5	3	EA
11	47006086	STUD BALL .31-18	6	EA
23	155106430	HINGE SS STL.075X1.5X1.5X114	1	EA
3	155106413	STANTION SHELF AL459919X4.5	5	EA
24	155106421	HINGE SHELF 47007796X108.38	1	EA
10	155106428	CYLINDER SUPPORT SHIM AL.125X4.75X6.48	6	EA
11	47006086	STUD BALL .31-18	6	EA
13	47006165	SPRING GAS 70LB 12/8.5	3	EA
12	155106429	CYLINDER SUPPORT AL 450188X3	3	EA



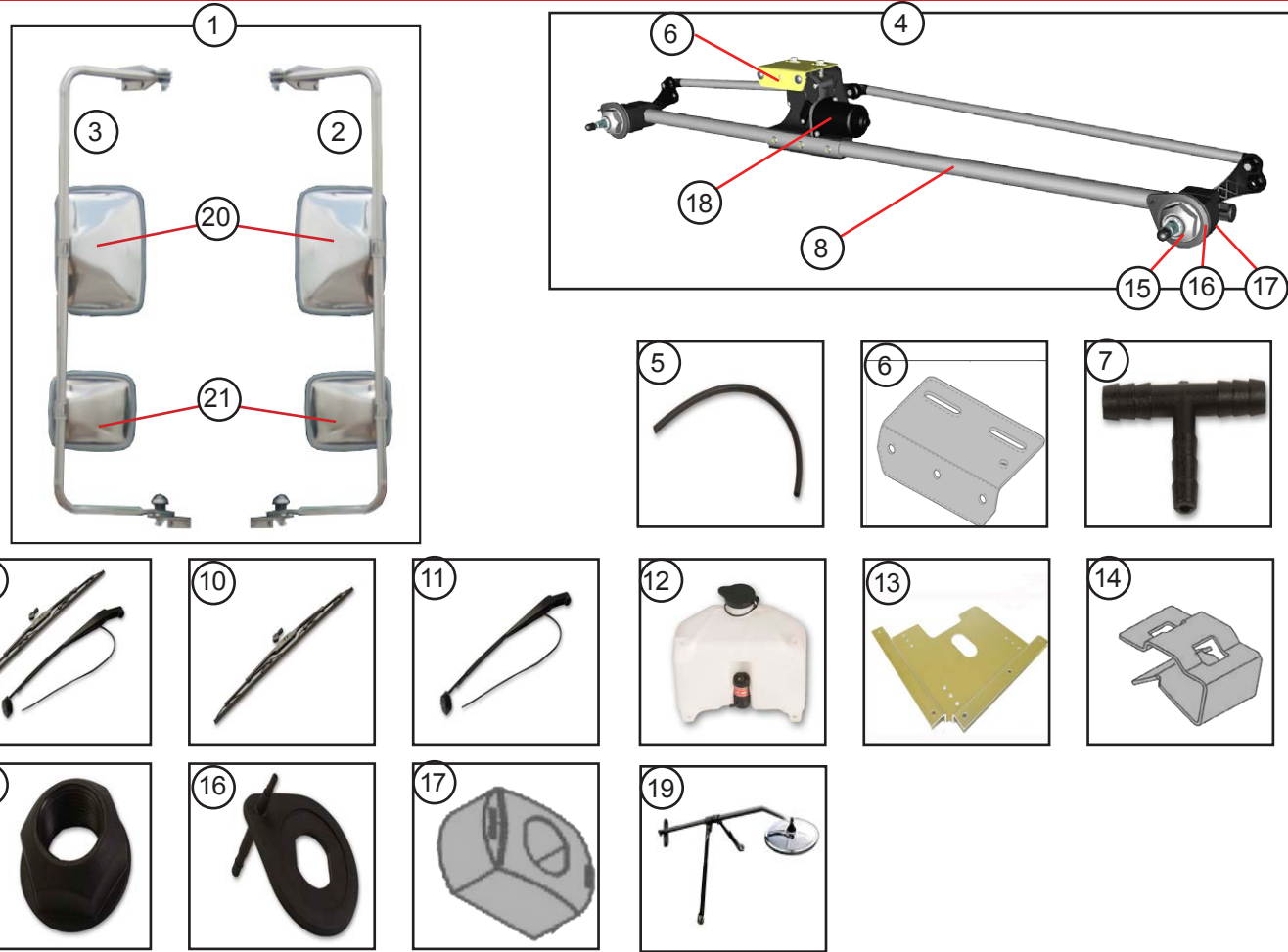
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
FRONT BUMPER				
1	47003811	BUMPER STEEL FRONT 88W 9IN	1	EA
2	095008405	BRACKET BPR FRT STL 7GAX9.5X15.25	2	EA
REAR BUMPER				
3	47003810	BUMPER REAR 10" DEEP	1	EA
4	006507405	HANGER BUMPER STEEL .312X7X10.38	2	EA
5	006370401	RUBBER BUMPER GUARD X18	2	EA



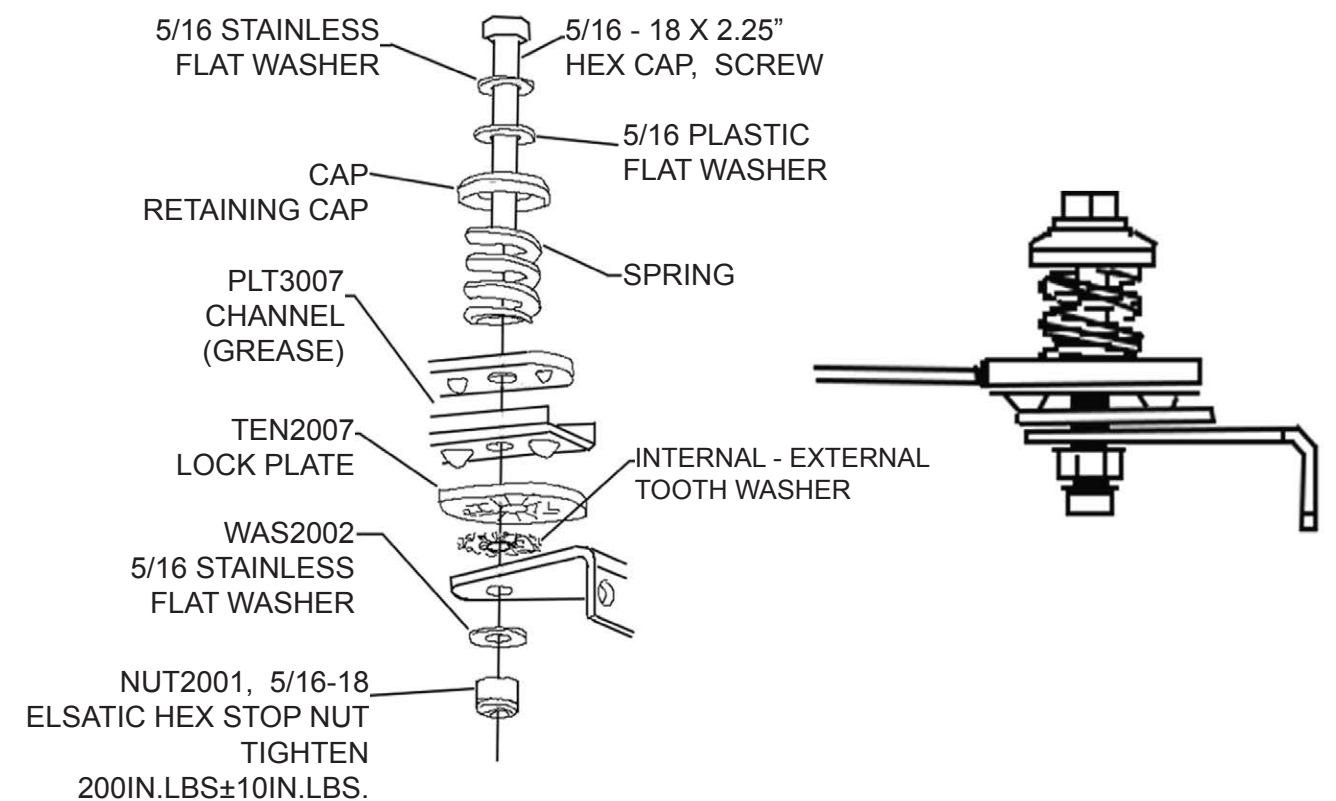
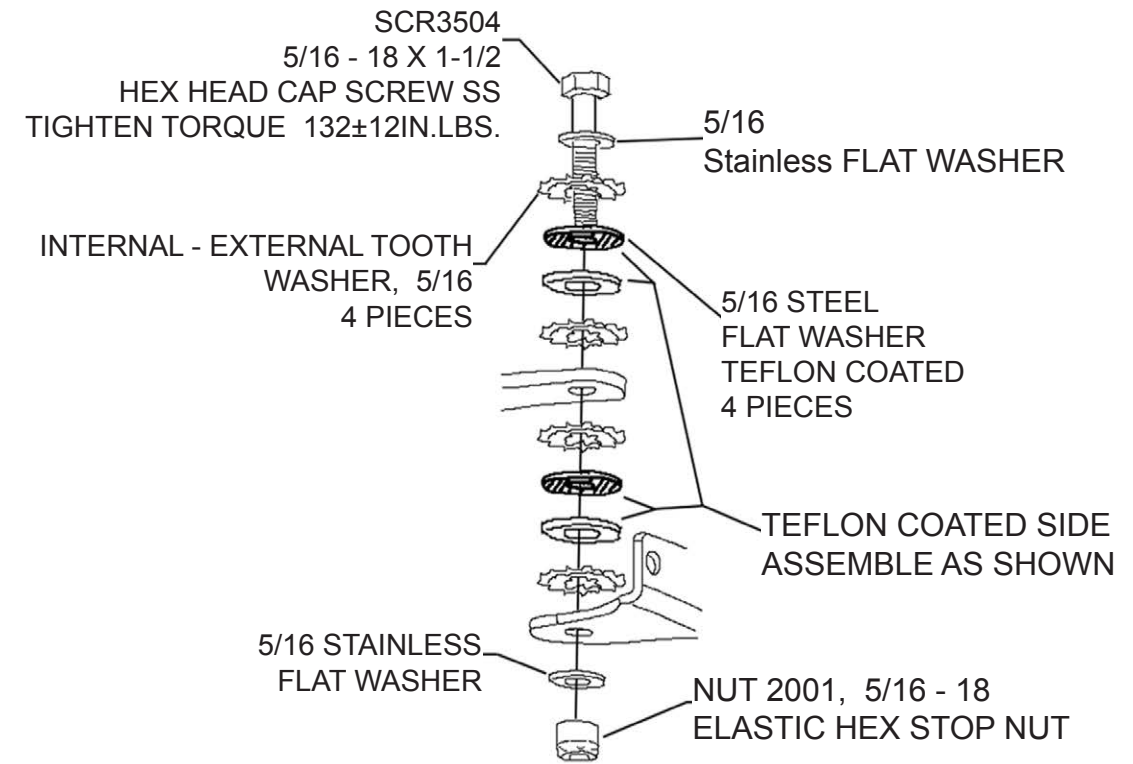
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	46029037	KIT KEYLESS RF W/2 FOBS 2011	1	EA
2	110094401	PLATE MOUNTING CMD AL.07X11.38X13.92	1	EA
3	006700405	LABEL - DOOR LOCK CAUTION	2	EA
4	46023511	SWITCH ROCKER DOOR UNLOCK SPST	1	EA
5	46032317	SOLENOID 12V KEYLESS ENTRY	3	EA
6	001761415	BRACKET STEEL SOLENOID	1	EA
7	001761416	BAR STEEL STRIKER .25 YL	1	EA
8	001761410	GUARD AL .102X1.75X12	1	EA
9	090127200	LATCH ASSEMBLY BULKHEAD DOOR	1	EA
10	001761437	LATCH STRIKER STEEL .25	1	EA
11	001761015	LATCH KEYLESS CURBSIDE DOOR	1	EA
12	47000993	KEYLESS OVRIDE LOCK CYLINDER W/ 2 KEYS	1	EA

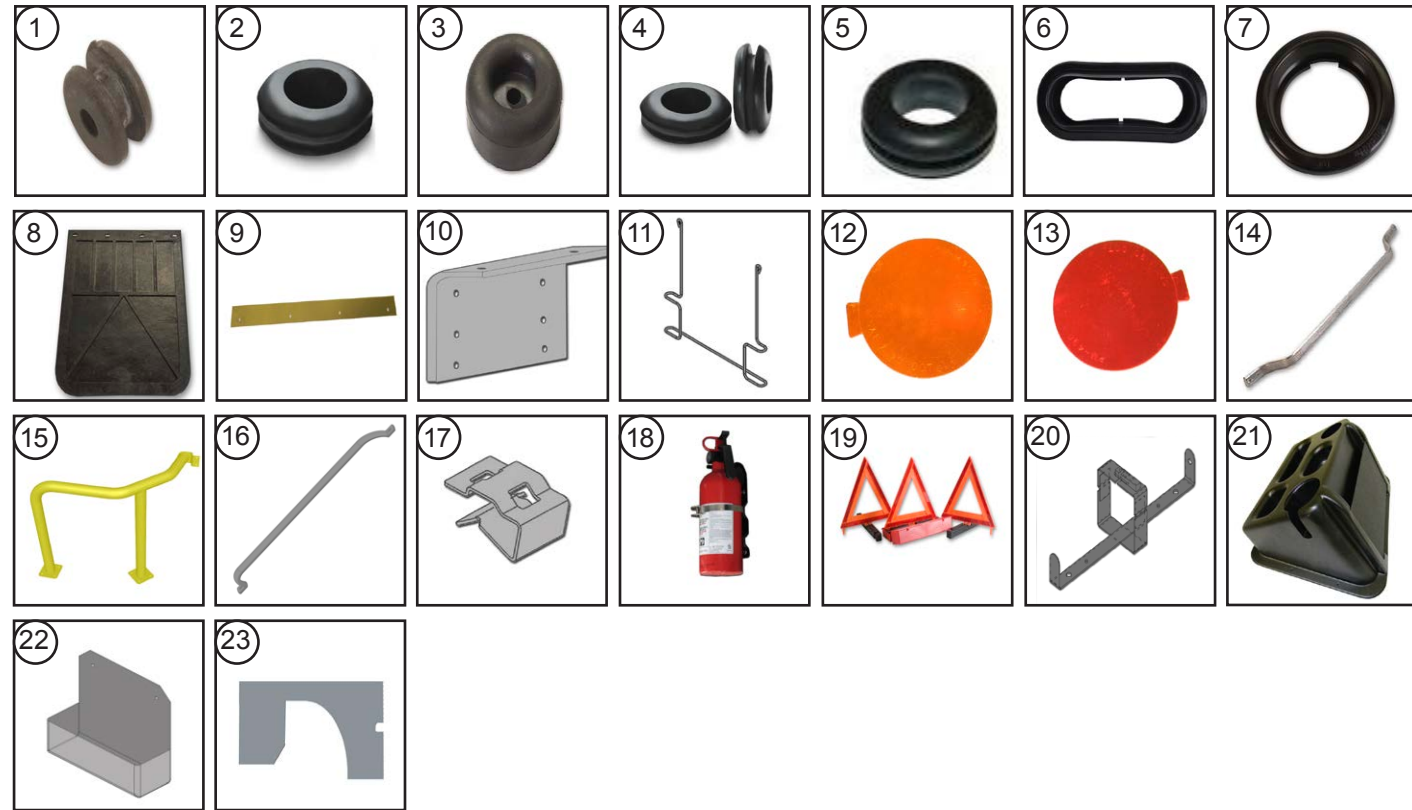
PART#	DESCRIPTION	QTY.	UNIT
155094200	BRACKET ASSEMBLY KEYLESS MODULE COVER W/ CARPET	2	EA
155094400	BRACKET KEYLESS CVR AL.102X9X18.48	1	EA
47009600	CARPET KEYLESS MODULE COVER	1.5	FT
001761204	LOCK KYLS ENTRY ASSEMBLY D/S RH	1	EA
46032317	SOLENOID	1	EA
001761410	GUARD AL .102X1.75X12	1	EA
46023511	SWITCH ROCKER DOOR UNLOCK SPST	1	EA
090127003	KEYLESS OVERRIDE ROLL UP DOOR ASSEMBLY	1	EA
003761415	Z ARM LVR STL 11GAX1.62X3.34	1	EA
47000993	LKCYL W/2KEYS W/DUST CVR	1	EA
090127405	LOCK PLATE AL .25X3X3	1	EA
40900089	13GAUGE STEEL CAM W/DICHROMATE COAT	1	EA
090127200	LATCH ASSEMBLY BULKHEAD KEYLESS	1	EA
001285226	BAR STRIKER ASSEMBLY	1	EA
001285425	PLATE BLKH LATCH 11GAX5.76X9.38	1	EA
001285426	PLATE BACK BLKH LAT 11GAX5.76X9.38	1	EA
001285430	HSNG STL LAT 11GAX11.88X15.5	1	EA
46032317	SOLENOID KEYLESS 12V W/SPRING	1	EA
001761437	LATCH STRIKER BLKH STEEL .25 YL	1	EA
001761208	LATCH KEYLESS ASSEMBLY D/R RH	1	EA
001761412	ZEE MOUNTING AL .125X3.59X11.91	1	EA
001761403	CHANNEL COVER AL .125X5.47X10.92	1	EA
46032317	SOLENOID KEYLESS 12V W/SPRING	1	EA
001761404	LATCH THUMB AL .125X.62X3.71	1	EA
003761415	ZEE ARM LEVER STEEL 11GAX1.62X3.34	1	EA
150127017	KEYLESS OVERRIDE ROLL UP DOOR W/COVER	1	EA
003761415	ZEE ARM LEVER STEEL 11GAUGE X1.62X3.34	1	EA
150127465	SHIM DUST COVER AL .188X2.63X2.63	1	EA
150127466	SHIM LOCK AL .188X2.65X2.65	1	EA
40900089	13GA STEEL CAM W/DICHROMATE COAT	1	EA
47000993	LOCK CYLINDER W/2KEYS W/DUST COVER	1	EA
136060400	RECEPTACLE W/P PLASTIC	1	EA

PART#	DESCRIPTION	QTY.	UNIT
1111953	FUSE ATC/ATO 20 AMP	1	EA
46023511	SWITCH ROCKER DOOR UNLOCK SPST	1	FT
46029037	KIT KEYLESS RF WITH 2 KEY FOBS	1	EA
006700405	LABEL DOOR LOCK CAUTION	2	EA
1107324	GROMMET .625X.25X.875	1	EA
46004416	GROMMET 1X.25X1.375	1	EA
002392002	TIEWRAP PUSH INS .25	16	EA

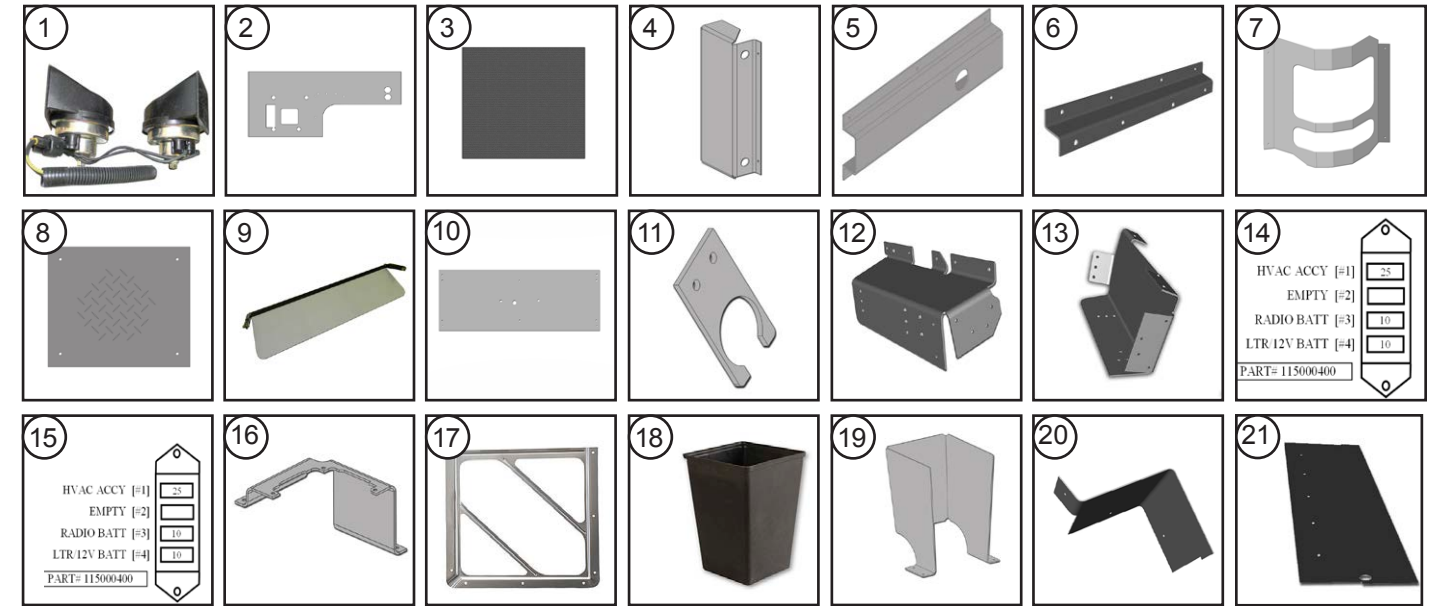


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	007251004	MIRROR INSTALLATION	1	PR
2	47005664	MIRROR ASSEMBLY ROADSIDE HEATED	1	EA
3	47005665	MIRROR ASSEMBLY CURBSIDE HEATED	1	EA
4	117363001	WINDSHIELD WIPER INSTALLATION (INCLUDES ITEMS 5,6,7, 8)	1	EA
5	1107122	HOSE .188 ID WSW	12	FT
6	083055454	BRACKET WIPER MOTOR	1	EA
7	1101694	TEE WSWA U/T	1	EA
8	47004187	WIPER SYSTEM TBLR 2 PIVOT	1	EA
9	146363002	WIPER ARM WITH BLADE	1	EA
10	47004134	BLADE 24IN BLACK	1	EA
11	47004206	ARM WSW WET 22IN RADIAL BLACK	1	EA
12	47004137	RSVR W/PUMP WSWA	1	EA
13	003705413	BRACKET MOUNTING RSVR	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	47005099	MIRROR FRONT SIDE VIEW	1	EA
20	47005611	MIRROR HEAD 10"	2	EA
21	47005671	MIRROR HEAD 8" ROUND	2	EA





ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	1107324	GROMMET .625X.25X0.875	1	EA
2	1107109	GROMMET .375X.125X.625	1	EA
3	1107079	GROMMET 1X.125X1.375	1	EA
4	44000052	GROMMET .688X.125X1	2	EA
5	46004416	GROMMET 1X.25X1.375	1	EA
6	46027656	GROMMET OBLONG BLACK	2	EA
7	46004443	GROMMET ROUND BLACK 4IN LAMP	4	EA
8	1107308	MUD FLAP BLACK NO LOGO 20X24	1	PR
9	7504428	RETAINER MD/FLP AL .125X1.5X20	2	EA
10	80795014	ANGLE RETAINER AL .188X5X20	2	EA
11	47009706	SUPPORT MUD FLAP	2	EA
12	46025018	REFLECTOR 2.88" AMBER	2	EA
13	46025017	REFLECTOR 2.88" RED	4	EA
14	96721405	GRAB HANDLE 28" AL 450243X39.58	1	EA
15	47001047	GRAB RAIL POWDER COATED YELLOW	1	EA
16	47001082	GRAB HANDLE .5" X 17"	1	EA
17	46021115	CLIP PAN LARGE (MEDIUM - 46021114 / SMALL - 46021113)	5	EA
18	47009621	FIRE EXTINGUISHER 2.5 LB.	1	EA
19	47009547	TRIANGLE KIT SAFETY	1	EA
20	47009548	BRACKET MOUNTING TRIANGLE KIT	1	EA
21	47009653	CENTER CONSOLE	1	EA
22	150107400	HOLDER FIRST AID KIT	1	EA
23	006526401	PANEL SPLASH VINYL .125X19.25X51.6	2	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	115085004	HORN		EA
2	093116410	INSULATION DASH WALL	1	EA
3	47009600	CARPET BULKHEAD GREY	18.5	FT
4	155053406	GUARD LAMP LOWER AL .07X11.2X21.25	2	EA
5	155127400	GUARD KMR LAMP AL 450039X16.44	4	EA
6	097105453	GUARD WIRING BULKHEAD KYLS AL .07X1.85X20	1	EA
7	003711425	GUARD VENT AL .102X14.11X19.37	1	EA
7	003711426	GUARD VENT AL .102X14.11X13.14 RH	1	EA
7	003711427	GUARD VENT AL .102X14.23X17.95 RR	2	EA
8	155019400	HEEL REST ALD .08X9.25X11 LH	1	EA
9	47005504	SUN VISOR 8X33	2	EA
10	100092400	BRACKET DOME LAMP	3	EA
11	090087401	PLATE FILLER WIRING AL.102X 1.44X2.63	2	EA
12	115026400	SPLASH SHIELD AL .125X8.95X19.92 LH	1	EA
13	077260404	SPLASH PAN AL .125X8.47X19.23 RH	1	EA
14	095000400	LABEL FUSE BLOCK LH	1	EA
15	095000401	LABEL FUSE BLOCK RH	1	EA
16	115084402	BRACKET MOUNTING FUSE BLOCK AL .102X6.4X8.66	1	EA
17	43001401	PLACARD HOLDER W/BK (SPRING CLIP 47009300)	4	EA
18	45200051	RECEPTICLE TRASH	1	EA
19	05M078011	BRACKET SUPPORT TRASH RECEPTICLE	1	EA
20	083005459	PLATE FILR AL .07X5.83X13.64 DLH SLIDING WINDOW	1	EA
21	083005452	PLATE FILR AL .07X4.08X27.58 DLH SLIDING WINDOW	1	EA
NS	7600858	STIFFENER AL 450003X33.5DLH SLIDING WINDOW	1	EA



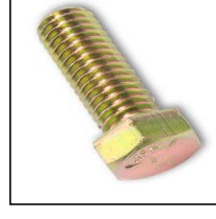
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	46000206	HEADLAMP ASSEMBLY	2	EA
2	46000615	LAMP PARK / TURN (GROMMET - 46004403 x2)	2	EA
3	46002222	LAMP COMBO STOP / TURN / TAIL (SHOWN W/ GROMMET)	2	EA
4	46001431	LAMP BACK UP (SHOWN W/ GROMMET 46004402)	2	EA
5	46001339	LAMP CLEARANCE MARKER LED AMBER	6	EA
5	46001344	LAMP CLEARANCE MARKER SIDE LED AMBER	2	EA
6	46001380	LAMP CLEARANCE MARKER LED RED	3	EA
7	46001340	LAMP CLEARANCE MARKER LED RED	2	EA
7	46001358	LAMP CLEARANCE MARKER LED RED SIDE REAR	2	EA
8	46001380	LAMP CLEARANCE MARKER LED RED P2 D/FUNC	1	EA
9	46001905	LAMP AUX STOP	1	EA
10	46002636	LAMP DOME LED CAB (MOUNTING BRACKET - 090091403)	1	EA
10	46002636	LAMP DOME CARGO	2	EA
11	47006065	BRACKET MOUNTING DOME LAMP CARGO	2	EA
12	46002437	LAMP LICENSE PLATE	1	EA
13	46023508	SWITCH ROCKER DOME CAB SPST ON-OFF	1	EA
14	46023603	SWITCH ROCKER DOME CARGO SPDT ON-ON	1	EA
15	46023511	SWITCH ROCKER DOOR UNLOCK SPST	1	EA
16	46023605	SWITCH ROCKER DASH FAN SPDT ON-OFF-ON	1	EA
17	46023611	SWITCH ROCKER BASE ONLY SPDT ON-ON	1	EA
18	46023618	SWITCH ACTUATOR ONLY HEATED MIRRORS	1	EA
19	46023603	SWITCH ROCKER DOME CARGO SPDT ON-ON	1	EA
20	46030011	FAN 2 SPEED 270 CFM	1	EA
21	48200166	CAMERA BACK UP	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	48200164	MONITOR DISPLAY BACK UP CAMERA	1	EA
2	46003017	LAMP INTERMITANT WIPER	1	EA
3	46025594	RADIO AM/FM/WB/RBDS	1	EA
4	46025590	SPEAKERS 6.5" BLACK	2	EA
5	46025559	ANTENNA TOP/SIDE MOUNT	1	EA
6	46024001	SWITCH P/BUT NC DOOR AJAR	1	EA
7	95M789301	BRACKET SWITCH DOOR	1	EA
NS	95M789302	BRACKET SWITCH DOOR ANGLE AL .125X1X1X1.5	1	EA
8	46003020	LAMP DOOR AJAR	1	EA
9	46002427	LAMP CLEAR STEPWELL	1	EA
10	46025305	SWITCH MAGNETIC REED NORMALLY OPEN	1	EA
11	46027377	RECP CHR FOR BLK HTR CRD	1	EA
12	46032336	TIMER 20 SEC 10A MAX	1	EA
NS	46032320	TIMER 30 MIN CARGO DOME LAMP	1	EA
14	150127459	SUPPORT WIRE RACK AL .125X2X28.5	2	EA

PART#	DESCRIPTION	QTY.	UNIT
46025591	HARNESS SPEAKER	1	EA
88117437	HARNESS JUMPER TEE GENERIC	1	EA
88117513	HARNESS LAMP SWITCH GROUND	1	EA
090086200	HARNESS REAR WIRING ROADSIDE BACK PANEL	1	EA
090091202	HARNESS RFNO RSF	1	EA
090093202	HARNESS JUMPER CARGO DOME LAMP	1	EA
090094201	HARNESS KEYLESS RFNO GEN	1	EA
090094204	HARNESS COMMAND CENTER KEYLESS	1	EA
092086205	HARNESS REAR WIRING CURBSIDE BACK PANEL	1	EA
092094202	HARNESS INSTRUMENT PANLE AREA KEYLESS	1	EA
092094203	HARNESS POWER KEYLESS SPECIAL	1	EA
092094204	HARNESS DASH KEYLESS SPECIAL	1	EA
093051201	HARNESS ROCKER SWITCH FOR MIRRORS	1	EA
093093201	HARNESS ROOF 13/16FT6IN	1	EA
093093205	HARNESS TRANSOM TOP CENTER BRAKE LAMP	1	EA
095084202	HARNESS FUSE CENTER	1	EA
095084204	HARNESS INSTRUMENT PANEL	1	EA
095088201	HARNESS WIPER	1	EA
110094202	HARNESS KEYLESS RF GEN	1	EA
112081201	HARNESS MID BODY MARKER TURN LAMPS	1	EA
115084206	HARNESS COM CENTER	1	EA
122111201	HARNESS EXTENTION CORD 25' 120V	1	EA
135085204	HARNESS HOOD LED	1	EA
137392203	HARNESS JUMPER STEP WELL LAMP LED	1	EA
140088200	HARNESS JUMPER Y 2WR X48	2	EA
150094200	HARNESS KEYLESS SWITCH REAR DOOR	1	EA
155084203	HARNESS SWITCH RADIO OFF REVERSE TRIG W/RLY	1	EA
157388200	HARNESS JUMPER SPCL CHSML ICC	1	EA
157094203	CABLE MONITOR POWER	1	EA

HEX CAP SCREWS



Size	Description	Thread	Lengths														
			.62	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/2"	3"	3-1/4"	4"				
1/4" Hex Cap Screw	GR5 ZC/RO	20						1117009									
1/4" Hex Cap Screw	GR5 ZC/RoHS	20			1101688								1117818				
1/4" Hex Cap Screw	18-8 Stainless	20		1117816		1117819											
1/4" Hex Cap Screw	ASTM F593C	20															
5/16" Hex Cap Screw	18-8 Stainless	18															
5/16" Hex Cap Screw	GR8 ZC/Y	18			1117045											40300737	
5/16" Hex Cap Screw	ASTM F593	18			1117803				1117837								
5/16" Hex Cap Screw	GR5 ZC/R	16							1117049								
3/8" Hex Cap Screw	GR8 ZC/Y	18							1117049								
3/8" Hex Cap Screw	GR8 ZC/Y	16			1117843												
3/8" Hex Cap Screw	GR5 ZC/RO	16			47012646												
3/8" Hex Cap Screw	GR5 ZC/RoHS	16	40300056	40300054													
3/8" Hex Cap Screw	ASTM F593C	16															
7/16" Hex Cap Screw	GR8 ZC/Y	20															
1/2" Hex Cap Screw	GR5 ZC/RoHS	13															1117035
1/2" Hex Cap Screw	GR5 ZC/RO	13															
1/2" Hex Cap Screw	GR5 ZC/RoHS	13															
1/2" Hex Cap Screw	GR5 ZC	13															
5/8" Hex Cap Screw	GR5	11															

ZC	Zinc Coated
GR	Grade
Y	Yellow
RO	
RoHS	AS9100C ISO 9001:2008
ASTM F593C	American Standards Measurements Specifications

	Grade 5 Medium Carbon Steel
	Grade 8 Medium Carbon Alloy Steel
	Grade 2 Low or Medium Carbon Steel



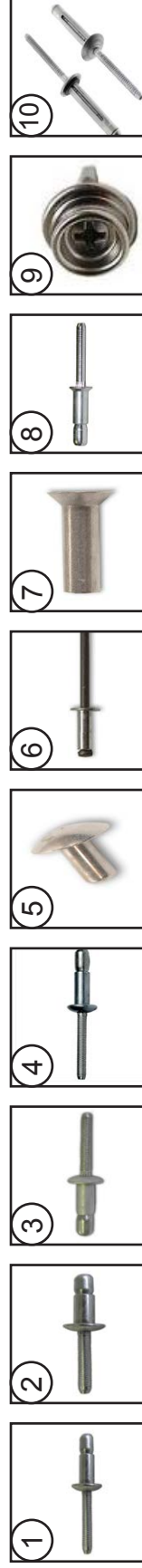
ZP - ZINC PLATED

Standard	Thread	FIG.	#8	#10	DIA.					
					1/4"	5/16	3/8"	.44	1/2"	
NYLON LOCKING NUT, HEX	32	1		052266						
NYLON LOCKING NUT, HEX	24	1		40301303						
NYLON LOCKING NUT, HEX ZP	24	3		1117307						
NYLON LOCKING NUT, HEX ZP	20	3			1117310					
NYLON LOCKING NUT, HEX ZP	18	3				1117838				
NYLON LOCKING NUT, HEX ZP	16	3					1117344			
LOCKING NUT HEX FLANGE .44-20 OVAL	20	4						1217003		
NUTSERT EXPANDING NYL .275 SQ	20	5		40900006						
NUT NON LOCKING	24	2		1117303						
NUT NON LOCKING	20	2			1117312					
NUT NON LOCKING	16	2					1117316			
GRADE 5										
NUT STL LK LRG FLG GD5 .31-18	18	4				40100560				
NUT STL HEX LK B ZP .5-13 GR 5	13	1							1117283	
Stainless										
NUT SS LOCKING	32	3	1117347	1117699						
NUT SS LOCKING	24	6		1103354						
NUT SS LOCKING	20	6			1117336					
NUT SS NON LOCKING	20	7			40100044					
NUT SS ACORN LOW CROWN	20	8			40100061					
Speciality										
CHANNEL NUT WITH SPRING 1 X 1-1/4"	20	9			47009988					

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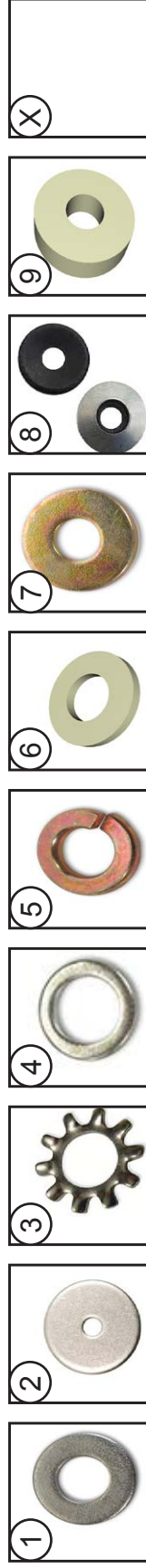


MAGNA LOCK	Diameter	Fig.	.25	.312	.375	.438	.44	.5	.562	.625	.687	.75	.875	1"
HUCK R6-4	.188	1		1117084	1117061									
HUCK R8-6	.25	2		1117087										
PROTRUDING HEAD	.25	3			40200304					40200303				
FLUSH HEAD B6-4	.25	4						40200630						
RIV AL BRAIZER HEAD	.125	5		1117402	1117404	1117405		1117406						
RIV AL BRAIZER HEAD	.188	5		1117351	1117353	1117355		1117357	1117359	1117361	1117363	1117365		
RIV AL BRAIZER HEAD	.25	5						1117380					1117390	1117395
RIV AL BRAIZER HEAD MOD	.25	5					40200214	1117409	1117410		1117408			
RIV AL FLAT HEAD	.188	7					1117436							
RIV AL FLAT HEAD POP	.25	7								40200630				
RIV AL DOME HEAD BLIND	.125	10	1117464											
RIV AL DOME HEAD BLIND	.188	10	1117456					1117458		1117459				
POP AL OPEN END BLIND	.125	6			1117421									
POP AL OPEN END BLIND	.188	6	1117456		1117457					1117459		1117458		
POP CLSD BLACK		8						40200629		40200631				
SNAP FASTNER		9						40900925						
BULB TYPE BLIND w/WASHER	.188	10			40200621			40200501						

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Standard	Center	FIG.	3/8	1/2	9/16	5/8	3/4"	7/8	1"	1-1/4"	1-3/4"
#10 TYPE B FLAT WASHER ZINC/ROHS	.19	1		1117929							
#10 X 1 FENDER WASHER ZC	.19	2							1117950		
#10 EXTERNAL TOOTH LW ZC	.19	3	1117971								
1/4 EXTERNAL TOOTH LW ZC	1/4	3		1117975							
1/4 TYPE B NARROW FLAT WASHER	1/4	4		1117941							
1/4 USS FLAT WASHER ZC/ROHS	1/4	1			1117953						
1/4 F436 (A325) FLAT WASHER ZC/ROHS	1/4	1			40000047						
.266 X 1 FLAT WASHER .060 THK ZC/RO	1/4	1							1117952		
1/4 USS FLAT WASHER	1/4	1		1117885							
5/16 SPLIT LOCK WASHER ZC/ROHS	5/16	5	1117965								
5/16 USS FLAT WASHER ZC/ROHS	5/16	1						1117955			
3/8 USS FLAT WASHER ZC/ROHS	3/8	1						1117957			
3/8 X 1 FLAT WASHER 1/4 THK NYLON	3/8	6							40000038		
1/2 TYPE B REGULAR FLAT WASHER	1/2	1								40000050	
1/2 TYPE B REGULAR FLAT WASHER ZC	1/2	1								1117945	
1/2 TYPE B WIDE FLAT WASHER ZC/ROHS	1/2	1									1117959
Grade 8											
5/16 USS FLAT WASHER GR 8 ZC/N	5/16	7						1117937			
3/8 USS FLAT WASHER GR 8 ZC/N	3/8	7							1117947		
3/8 SAE FLAT WASHER GR 8 ZC/N	3/8	7					40000046				
7/16 USS FLAT WASHER GR 8 ZC/N	7/16	7								1217002	
1/2 SAE FLAT WASHER GR 8 ZC/N	1/2	7							1117943		
Stainless 18-8											
#10 X 5/8 BONDED SEALER 18-8 SS	.19	8				40000053					
1/4 X 5/8 BONDED SEALER 18-8 SS	1/4	8				40000051					
3/8 X 3/4 BONDED SEALER 18-8 SS	3/8	8					40000054				
3/8 X 1" BONDED SEALER 18-8 SS	3/8	8							40000055		
1/4 EXTERNAL TOOTH SS LW ZC	1/4	3		40000510							
Speciality											
WASHER NYLON .13 X .62 ID X 1.38OD	5/8	9									137147429

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	Diameter	Fig.	Length																
			.5	.625	.75	.875	1"	1-1/4"	1-1/2"	2-1/4"	3"								
18-8 Stainless																			
PHILLIPS TRUSS M/S 18-8 SS	8 - 32	1		1117716															
PHILLIPS TRUSS M/S 18-8 SS	10 - 24	1	1117800	1117814	40300498				40300451	1117835									
PHILLIPS TRUSS M/S 18-8 SS	1/4 - 20	1			1117784				40300453	40300454									
PHILLIPS TRUSS M/S 18-8 SS	5/16 - 18	1			1117928														
PHILLIPS FLAT M/S 18-8 SS	10 - 32	2								1117830									
PHILLIPS FLAT M/S 18-8 SS	1/4 - 20	2								1117782									
PHILLIPS ROUND M/S 18-8 SS	10 - 24	6																40300630	
6 LOBE PAN T/C M/S 18-8 SS	1/4 - 20	9								1117815									
Standard Steel RoHS																			
PHILLIPS ROUND M/S ZC/ROHS	8 - 32	6																	
PHILLIPS PAN TEKS/3 ZC/ROHS	10 - 16	5								1117839									
PHILLIPS TRUSS M/S ZC/ROHS	10 - 24	1																	1117793
PHILLIPS TRUSS M/S ZC/ROHS	10 - 32	1	1117723		1117688														
T/C - Thread Cutting																			
PHIL PAN T/S TYPE A ZC	10	8																	
PHIL TRUSS T/S TYPE A BLK	10	4								1117680									
PHIL PAN T/S TYPE A BLK	10	7								40300101									
PHIL PAN T/S TYPE A ZC	12	8								40300503									
6 LOBE PAN T/C	1/4 - 20	9								40300922									40300042



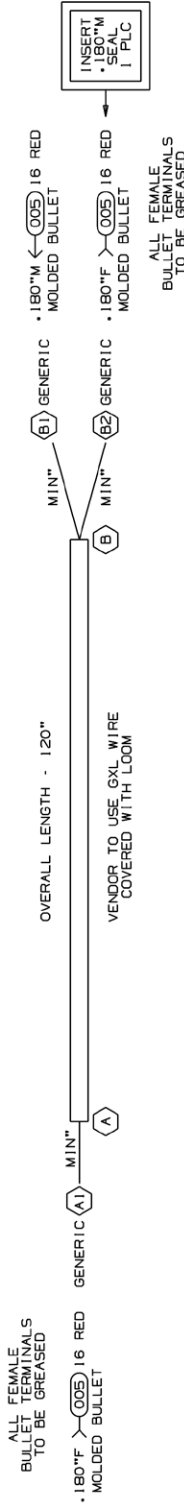
T/C Thread Cutting 6 Lobe Type A

Genuine OEM Parts

1.800.233.4823

www.morganolsonparts.com

DRAWING NO.	REV	SHT
007388310		1 of 1
DESCRIPTION	RELEASE TO PRODUCTION	
BY	CHK	DATE



CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
005	16 RED	A1, B1, B2	CHMSL

- 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 [111098]: 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.
- GXL WIRE.

NOTES:

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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED: .0005" .010"
 1. HOLE SIZE: .005" .010"
 2. DIMENSIONS: .005" .010"
 3. DIMENSIONS: .005" .010"
 4. DIMENSIONS: .005" .010"
 5. DIMENSIONS: .005" .010"
 6. DIMENSIONS: .005" .010"
 7. DIMENSIONS: .005" .010"
 8. DIMENSIONS: .005" .010"
 9. DIMENSIONS: .005" .010"
 10. DIMENSIONS: .005" .010"

DATE: 09JUL07
 TIME: 07-0743
 DO NOT SCALE

HARNESSES JUMPER 120" 1W "Y"
 (180F TO 180F/180M)

DRAWING NO. 007388310
 SHEET 1 of 1

HARNESSES AND LOOM TOLERANCES

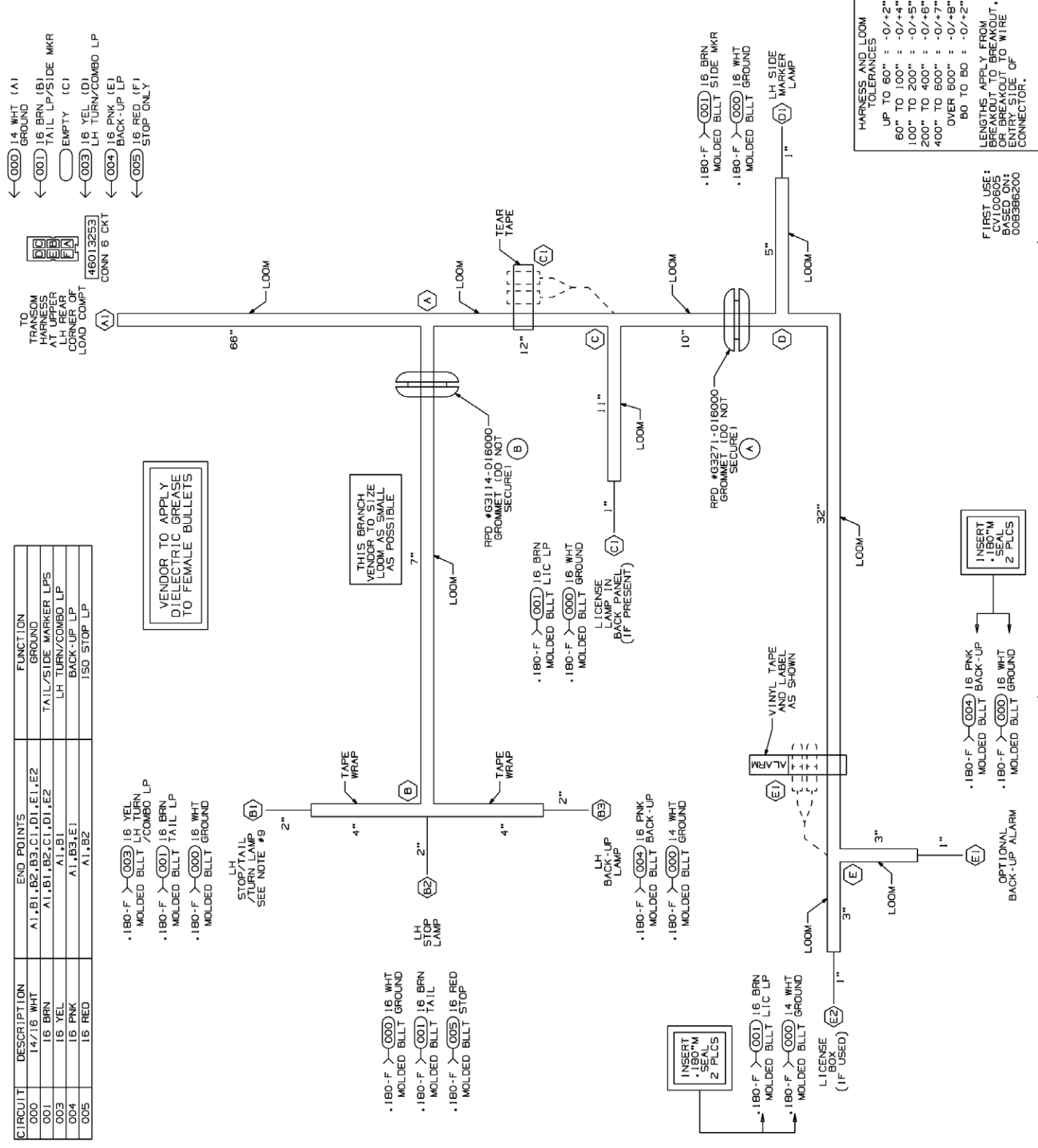
UP TO 60"	= -0/+2"
60" TO 100"	= -0/+4"
100" TO 200"	= -0/+5"
200" TO 400"	= -0/+6"
400" TO 600"	= -0/+7"
OVER 600"	= -0/+8"

80 TO 80 = -0/+2"

TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESSES LENGTH, BREAKOUT TO END, OR LOOM.

FIRST USE: 180° F MOLDING BULLET OR BREAKOUT TO WIRE TRANSOM.

DRAWING NO.	REV	SHT
090086200	C	1 of 1
DESCRIPTION	RELEASE FOR PRODUCTION	
BY	CHK	DATE



CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	14/16 WHIT	A1, B1, B2, B3, C1, D1, E1, E2	GROUND
001	16 BRN	A1, B1, B2, C1, D1, E2	TAIL/SIDE MARKER LPS
003	16 YEL	A1, B1	LH TURN/COMBO LP
004	16 PNK	A1, B3, E1	BACK-UP LP
005	16 RED	A1, B2	150 STOP LP

- 180-F 16 YEL MOLDING BULLET / COMBO LP
- 180-F 16 BRN MOLDING BULLET / TAIL LP
- 180-F 16 WHIT MOLDING BULLET / GROUND
- 180-F 16 YEL MOLDING BULLET / LH TURN LAMP
- 180-F 16 PNK MOLDING BULLET / BACK-UP LP
- 180-F 16 WHIT MOLDING BULLET / GROUND

- 180-F 16 WHIT MOLDING BULLET / GROUND
- 180-F 16 BRN MOLDING BULLET / TAIL LP
- 180-F 16 WHIT MOLDING BULLET / STOP

- 180-F 16 PNK MOLDING BULLET / BACK-UP LP
- 180-F 16 WHIT MOLDING BULLET / GROUND

- 180-F 16 BRN MOLDING BULLET / LIC LP
- 180-F 16 WHIT MOLDING BULLET / GROUND

- 180-F 16 PNK MOLDING BULLET / BACK-UP LP
- 180-F 16 WHIT MOLDING BULLET / GROUND

FIRST USE: 180° F MOLDING BULLET OR BREAKOUT TO WIRE TRANSOM.

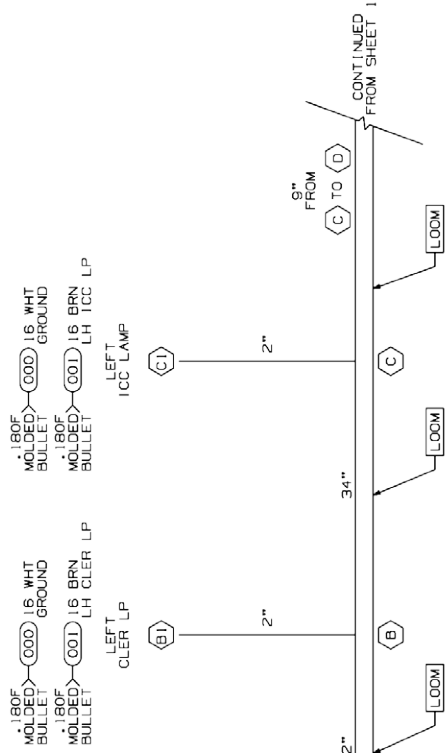
FIRST USE: 180° F MOLDING BULLET OR BREAKOUT TO WIRE TRANSOM.

DRAWING NO.	090091202	REV	A	SHT	2 of 2
DESCRIPTION	RELEASE FOR PRODUCTION	BY		CHK	
DATE	11/15/09	DATE		DATE	
BY	11/15/09	BY	11/15/09	BY	11/15/09
CHK		CHK		CHK	

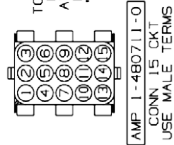
CIRCUIT	GA/COLOR	END POINTS	FUNCTION
109	16 ORN	A1,E1	WIPE PK SWITCH - OUTPUT
224	14 RED/GRN	A1,D2	BATTERY - SWITCHED
226	14 ORN/GRN	A1,D2	ACCESSORY - SWITCHED
300	12/14 WHT/RED	A1,D2,D2,SPLICE 2	AUX GROUND
304	16 YEL/BLK	A1,D3	DASH FAN LOW
305	16 GRN/BLK	A1,D3	DASH FAN HIGH
405	16 RED/YEL	A1,F2	AUXILIARY ACCESSORY

CIRCUIT	GA/COLOR	END POINTS	FUNCTION
000A	12 WHT	A1,E2,SPLICE 1	GROUND
000	14/16 WHT	B1,C1,D1,E1,F1,F2,F3,SPLICE 1	GROUND
001	16 BRN	A1,B1,C1,D1,F1,F3	CLEARANCE/ICC LPS
004	16 PNK	A1,F2	BACK-UP SIGNAL
106	16 LBL	A1,E1	WIPE PARK SWITCH B+
107	16 GRN/WHT	A1,E1	WIPE LOW
108	16 RED/WHT	A1,E1	WIPE HIGH

[SPLICE 1]
000A 12 WHT IS TO BE SPLICED TO THE 000 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) WIPE PARK SWITCH B+
- ← () EMPTY (5)
- ← (107) 16 GRN/WHT (6) WIPE LOW
- ← (108) 16 RED/WHT (7) WIPE HIGH
- ← () EMPTY (8)
- ← (109) 16 ORN (9) WIPE PARK SW OUTPUT
- ← (224) 14 RED/GRN (10) BATT (SW)
- ← (300) 12 WHT/RED (11) AUX GROUND
- ← (226) 14 ORN/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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GENERAL STANDARDS UNLESS OTHERWISE NOTED: .001" ± .010

- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO DIMENSION LINE UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO DIMENSION LINE UNLESS OTHERWISE NOTED.

DATE: 01SEP09 01SEP09 27989

DO NOT SCALE

HARN RFNO RSF 2009 M-100

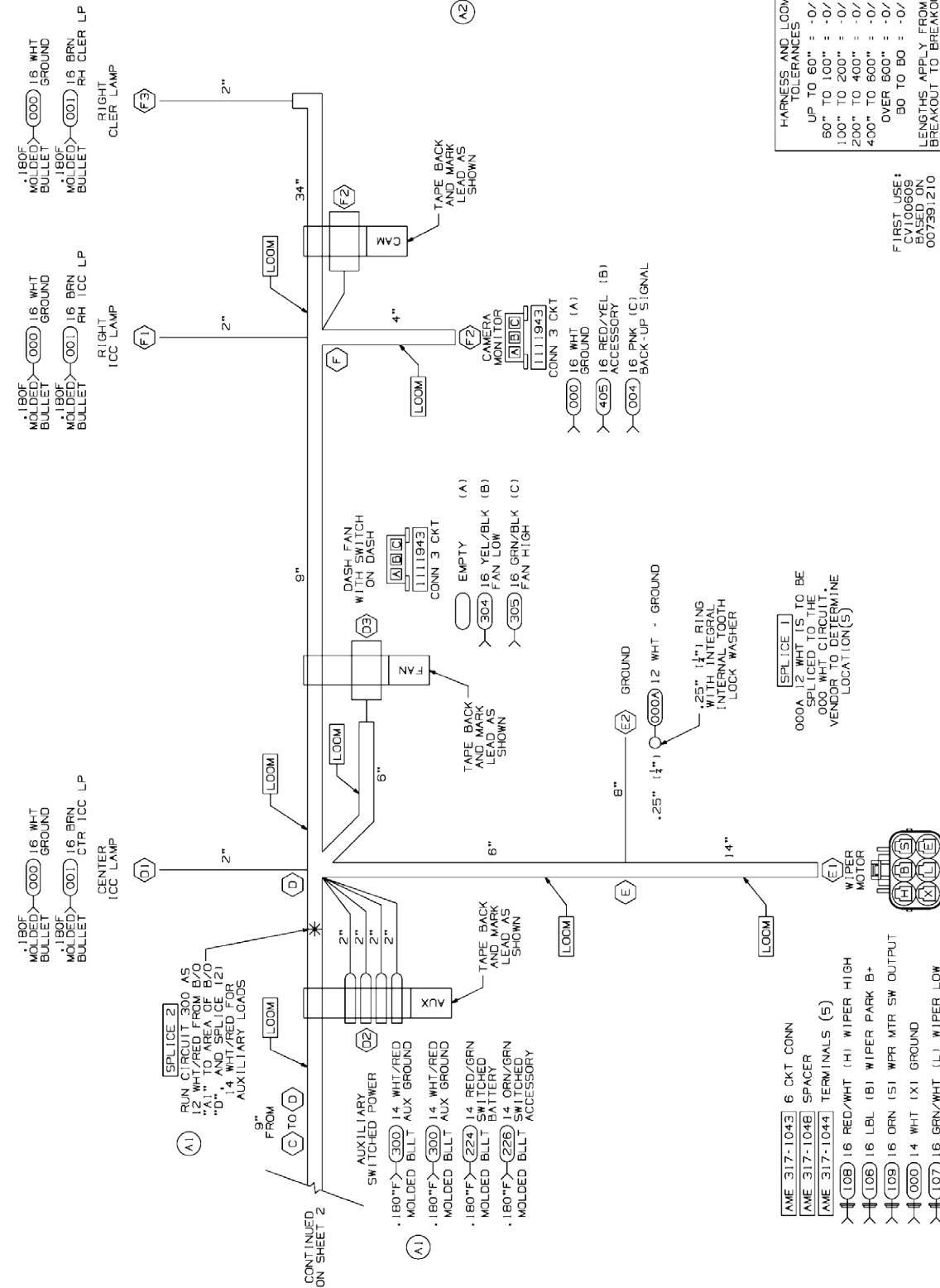
DRAWING NO. 090091202

SHT 2 of 2

SCALE NONE

REV A

DRAWING NO.	090091202	REV	A	SHT	1 of 2
DESCRIPTION	RELEASE FOR PRODUCTION	BY		CHK	
DATE	11/15/09	DATE		DATE	
BY	11/15/09	BY	11/15/09	BY	11/15/09
CHK		CHK		CHK	



- 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.
- CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED TO PERMANENTLY BE LINED HEAT SHRINK TUBING.
- TAPE (1111098) 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 LEVEL NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

NOTES:

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GENERAL STANDARDS UNLESS OTHERWISE NOTED: .001" ± .010

- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO DIMENSION LINE UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO DIMENSION LINE UNLESS OTHERWISE NOTED.

DATE: 01SEP09 01SEP09 27989

DO NOT SCALE

HARN RFNO RSF 2009 M-100

DRAWING NO. 090091202

SHT 1 of 2

SCALE NONE

REV 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"

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

FIRST USE: 000066 BASED ON 007391210

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

- ← (AME 317-1043) 6 CKT CONN
- ← (AME 317-1048) SPACER
- ← (AME 317-1044) TERMINALS (5)
- ← (108) 16 RED/WHT (H) WIPE HIGH
- ← (108) 16 LBL (B) WIPE PARK B+
- ← (109) 16 ORN (S) WPR MTR SW OUTPUT
- ← (000) 14 WHT (X) GROUND
- ← (107) 16 GRN/WHT (L) WIPE LOW
- ← () EMPTY (E)

DRAWING NO.	REV	SHT
090093202	A	1 OF 1
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		
A 80" WAS 84"		

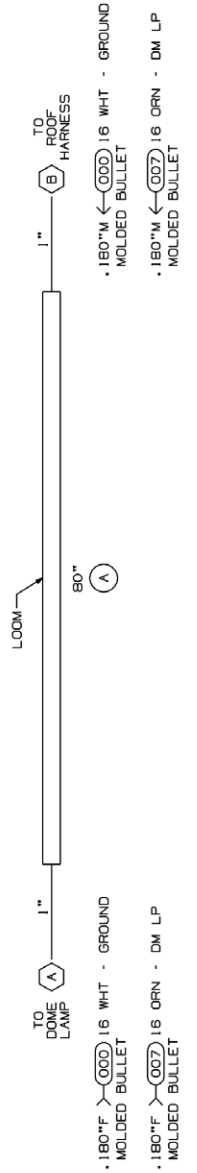
- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
 - VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
 - HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
 - CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
 - SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
 - TAPE [1111096]: 6" AT BREAKOUTS, 2" AT BUNDLE BREAKOUTS. MINIMUM WIRE 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 POLY LOOM UNLESS OTHERWISE NOTED.
- NOTES:
- GXL WIRE.

PROPRIETARY		
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MORGAN OLSON		
GENERAL STANDARDS UNLESS OTHERWISE NOTED:		
1. TOLERANCES: ±.000	2. DIMENSIONS: .005	3. FINISH: .010
4. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE TO BE TAKEN FROM THE EXTERIOR SURFACE UNLESS OTHERWISE SPECIFIED.		
5. ALL DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.		
6. ALL DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.		
DATE	DFW	28816
260CT09		260CT09
DO NOT SCALE		
NAME: HARN_LPR_CRG_D/LP		
DRAWING NO.: GEN .180BLLT		
SCALE: NONE		
SHT: 1 OF 1		
REV: 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"
60 TO 80"	: -0/+2"

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

FIRST USE:
CV100632
00758826
00758826



FEMALE BULLET TERMINALS TO BE GREASED

DRAWING NO.	REV	SHT
090094201		1 OF 1
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		

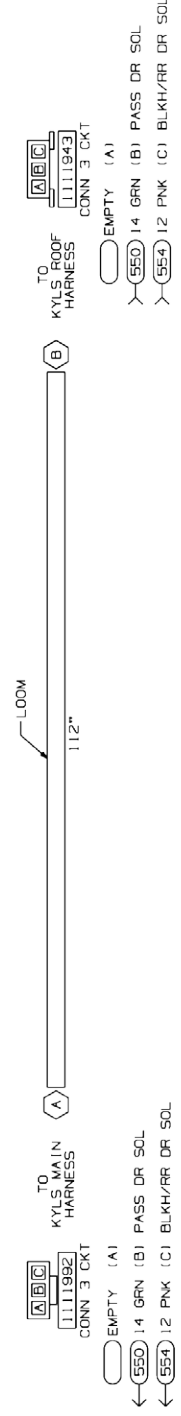
- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
 - VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
 - HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
 - CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
 - SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
 - TAPE [1111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS, OTHER THAN 24", 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.
- NOTES:
- GXL WIRE.

PROPRIETARY		
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MORGAN OLSON		
GENERAL STANDARDS UNLESS OTHERWISE NOTED:		
1. TOLERANCES: ±.000	2. DIMENSIONS: .005	3. FINISH: .010
4. ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE TO BE TAKEN FROM THE EXTERIOR SURFACE UNLESS OTHERWISE SPECIFIED.		
5. ALL DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.		
6. ALL DIMENSIONS ARE TO BE TAKEN FROM THE CENTERLINE UNLESS OTHERWISE SPECIFIED.		
DATE	DFW	28250
16SEP09		16SEP09
DO NOT SCALE		
NAME: HARN KYLS_RFND_GEN		
2009 M.100		
SCALE: NONE		
SHT: 1 OF 1		
REV: 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"
60 TO 80"	: -0/+2"

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

FIRST USE:
JW00014
085054202

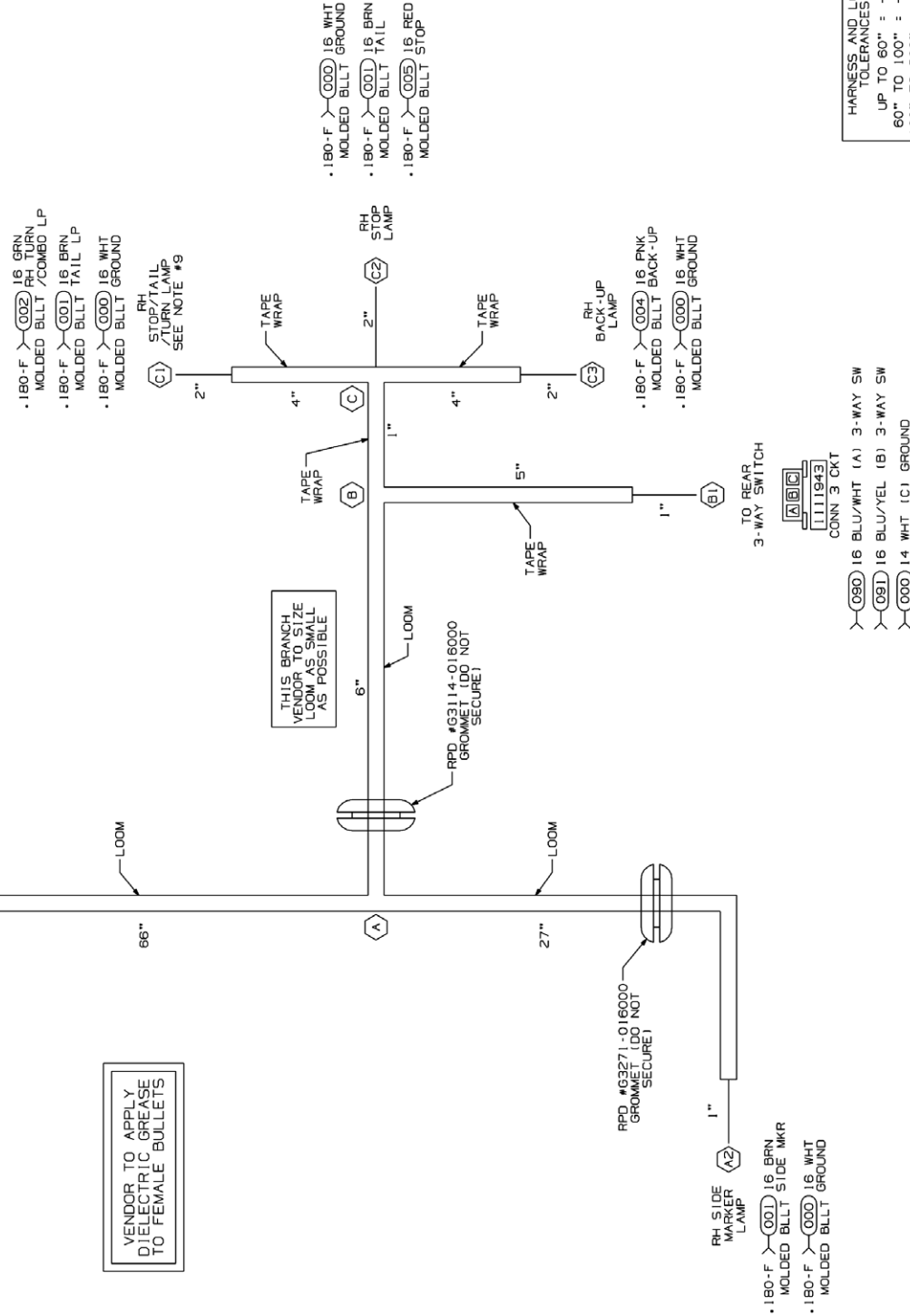


REV	DESCRIPTION	REV	SHT
092086205	A		1 of 1
REV.	DESCRIPTION	REV.	SHT
000	RELEASE FOR PRODUCTION		
001	REVISED "TO" AND "FROM" ARE SHOWN		
002	TAIL LAMP BREAKOUT AREA		

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	14/16 WHT	A1, A2, B1, C1, C2, C3	GROUND
001	16 BRN	A1, A2, C1, C2	TAIL/SIDE MARKER LPS
002	16 GRN	A1, C1	RH TURN/COMBO LP
004	16 PNK	A1, C3	BACK-UP LP
005	16 RED	A1, C2	150 STOP LP
090	16 BLU/WHT	A1, B1	3-WAY SWITCH
091	16 BLU/YEL	A1, B1	3-WAY SWITCH

- ← (000) 14 WHT (A) GROUND
- ← (001) 16 BRN (B) TAIL LP/SIDE MKR
- ← (002) 16 GRN (C) RH TURN/COMBO LP
- ← () EMPTY (D)
- ← (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

VENDOR TO APPLY DIELECTRIC GREASE TO FEMALE BULLETS



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"
80 TO 90 : -0/+2"

FIRST USE:
JW000311
BASED ON:
090086201
& 082086204

- WHEN ISOLATED STOP CIRCUIT 005 IS USED, CIRCUIT 002 CAN REMAIN AS COMBINATION OR CAN BECOME TURN ONLY BY INTO TURN SIGNAL SWITCH.
- VENDOR MAY REPLACE ASSEMBLED WITH WIRING TO CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW. HARNES TO BE TESTED FOR CONTENTS: SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM OTHER VIEW, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE (1111096): 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LOOM LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
- HARNES TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.

NOTES:
1. GXL WIRE.

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MORGAN OLSON

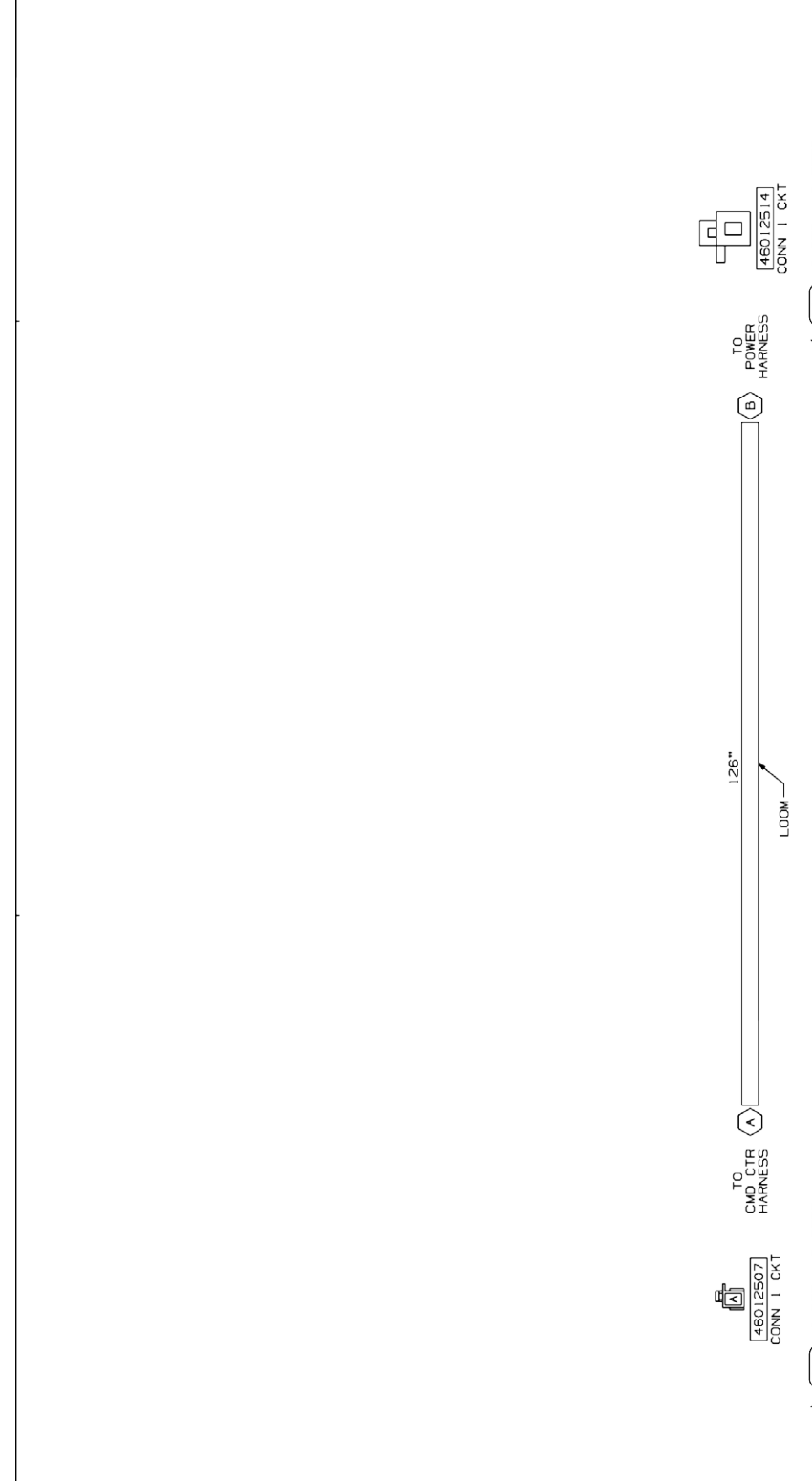
GENERAL STANDARDS UNLESS OTHERWISE NOTED: .005" ± .010
1. DIMENSIONS: U.S. UNITS.
2. DIMENSIONS: METRIC UNITS.
3. DIMENSIONS: ALL UNITS COMBINATION METRIC.
4. DIMENSIONS: ALL UNITS COMBINATION METRIC.
5. DIMENSIONS: ALL UNITS COMBINATION METRIC.
6. DIMENSIONS: ALL UNITS COMBINATION METRIC.

DATE: 092086205
DWG: 28410
REV: 24SEF08
DO NOT SCALE

HARN RR WRG RH BPNL
2009 CFF NON D/F/LR

DRAWING NO. 092086205
SHT 1 OF 1
SCALE NONE

REV	DESCRIPTION	REV	SHT
092094202	A		1 of 1
REV.	DESCRIPTION	REV.	SHT
	RELEASE FOR PRODUCTION		



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"
80 TO 90 : -0/+2"

FIRST USE:
CVT00628

NOTES:
1. GXL WIRE.

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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED: .005" ± .010
1. DIMENSIONS: U.S. UNITS.
2. DIMENSIONS: METRIC UNITS.
3. DIMENSIONS: ALL UNITS COMBINATION METRIC.
4. DIMENSIONS: ALL UNITS COMBINATION METRIC.
5. DIMENSIONS: ALL UNITS COMBINATION METRIC.

DATE: 090CT09
DWG: 28501
REV: 050CT09
DO NOT SCALE

HARN 1/P AREA KYC
2009 M-100 RTL FCC

DRAWING NO. 092094202
SHT 1 OF 1
SCALE NONE

DRAWING NO.	REV	SHT
092094203	A	1 OF 1
DESCRIPTION	DATE	BY
RELEASE FOR PRODUCTION	DATE	BY
A	110" WAS 108"	DATE
		DATE
		DATE

- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLSON CONNECTOR PIGTAILS SHOWN IN TERMINAL VIEW. VENDOR PART NUMBER SHOWN FOR REFERENCE ONLY.
- 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 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, ONLY UNLESS OTHERWISE NOTED.
- OXL WIRE.

NOTES:

PROPRIETARY

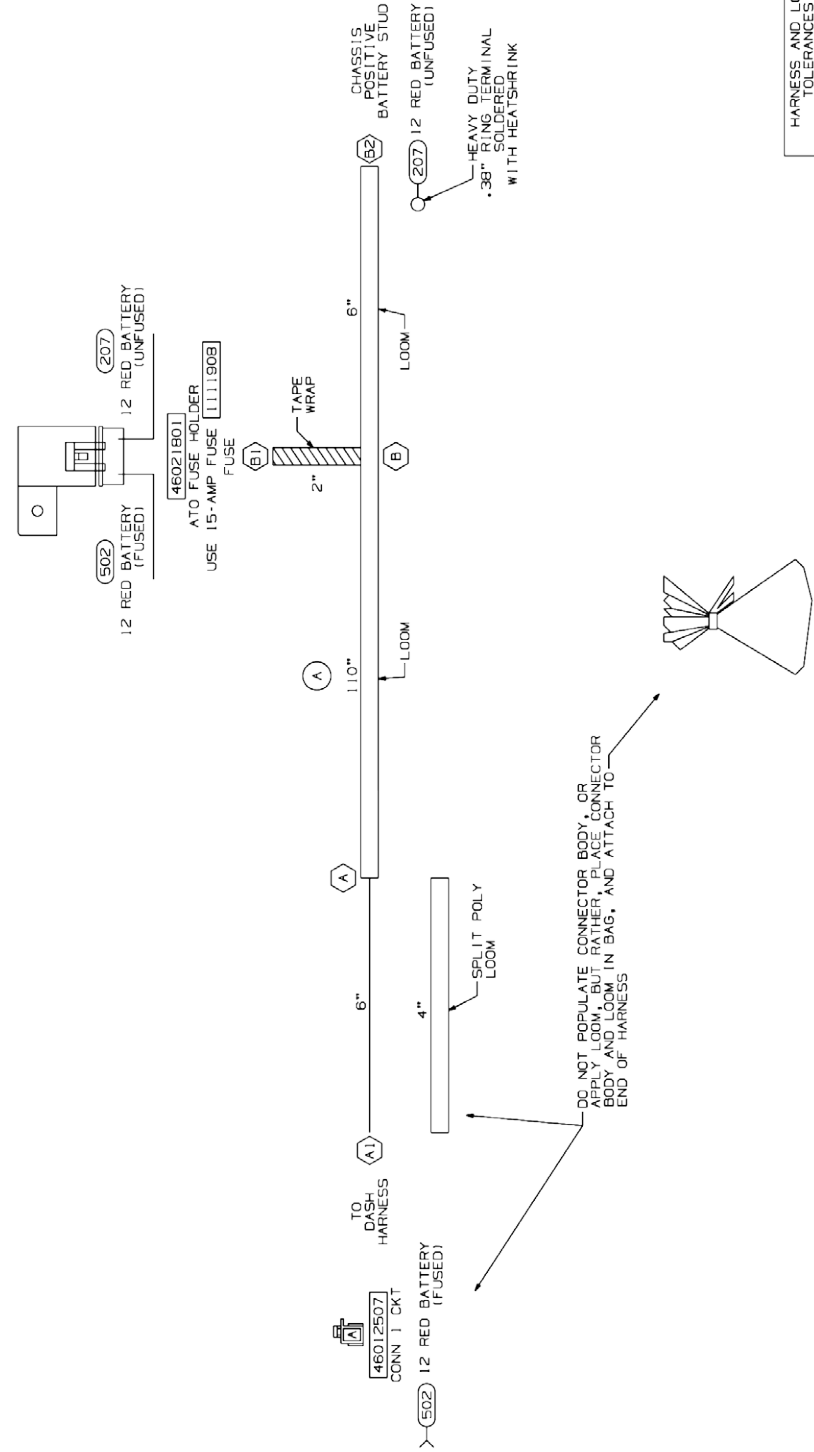
MORGAN
MOLSON

REVISIONS	DATE	BY
1	040CT09	28501
2	040CT09	040CT09
DO NOT SCALE		
NAME		
HARN PWR KYLS SPCL		
2009 M-100 RTL FCC		
SCALE	DATE	REV
1 OF 1	092094203	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"
60 TO 60 : -0/+2"

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

FIRST USE:
CV100526
BASED ON:
094084201



DRAWING NO.	REV	SHT
092094204		1 OF 1
DESCRIPTION	DATE	BY
RELEASE FOR PRODUCTION	DATE	BY
		DATE
		DATE
		DATE

- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLSON CONNECTOR 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 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 POLY LOOM UNLESS OTHERWISE NOTED.
- OXL WIRE.

NOTES:

PROPRIETARY

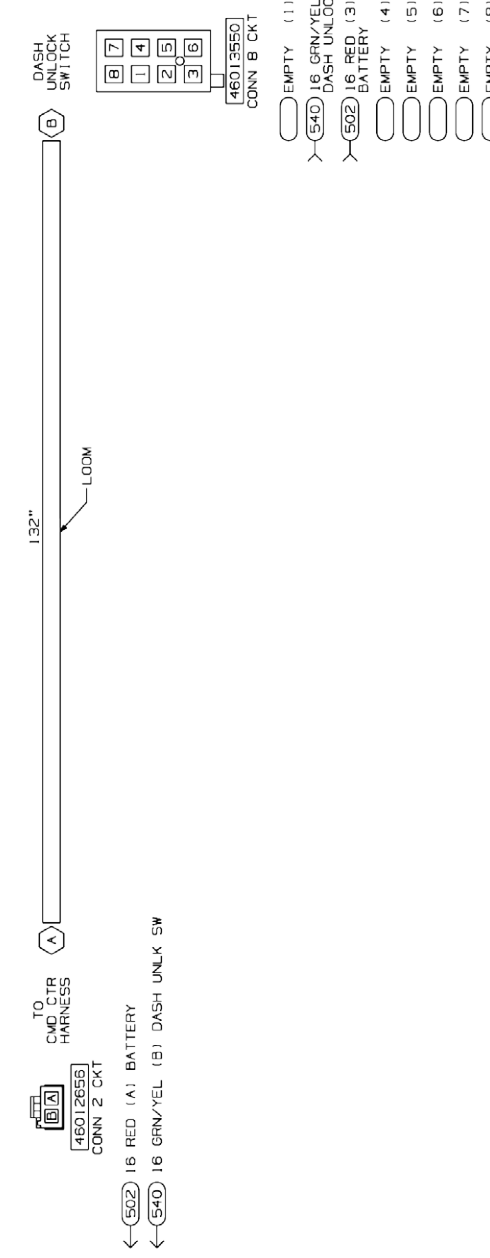
MORGAN
MOLSON

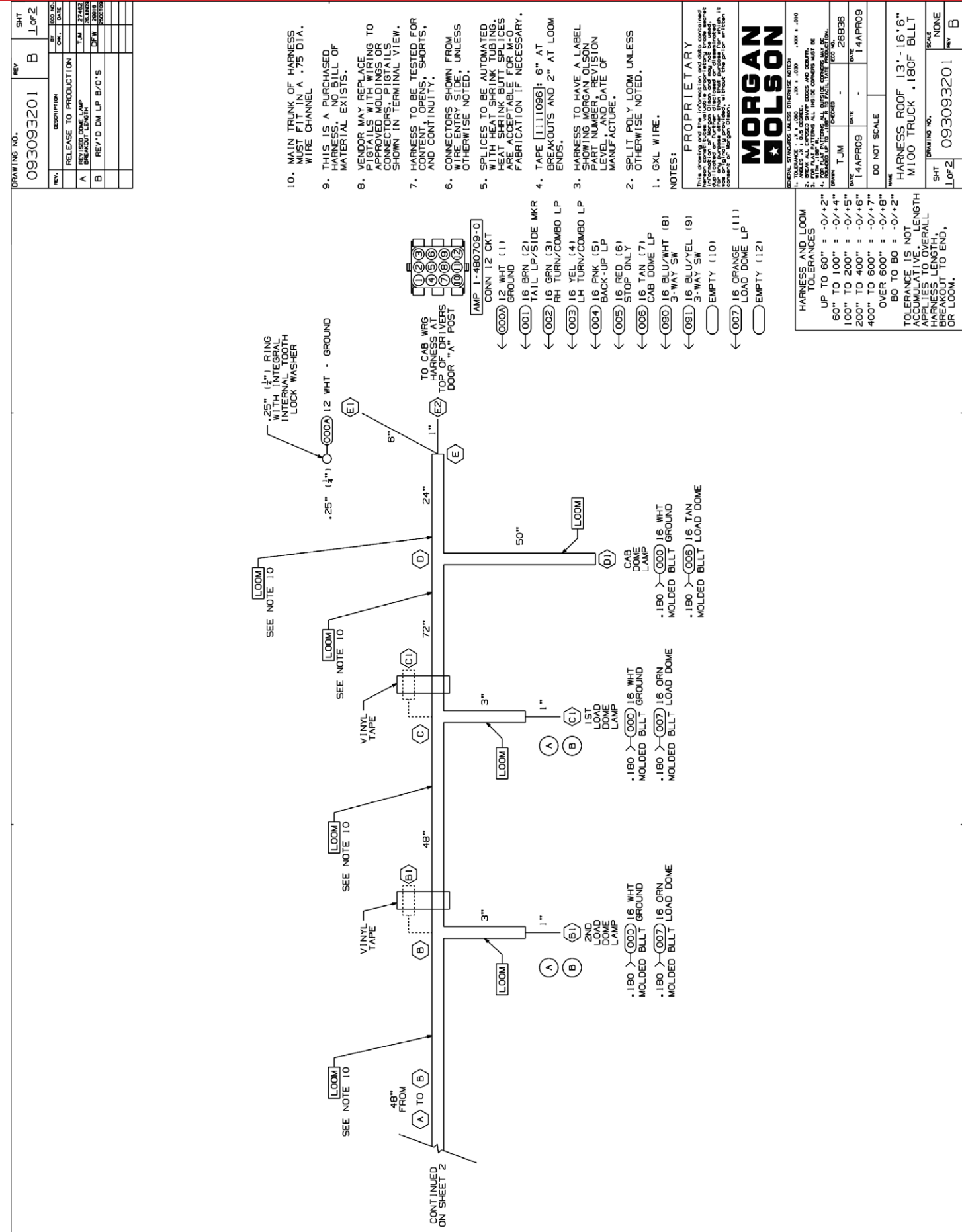
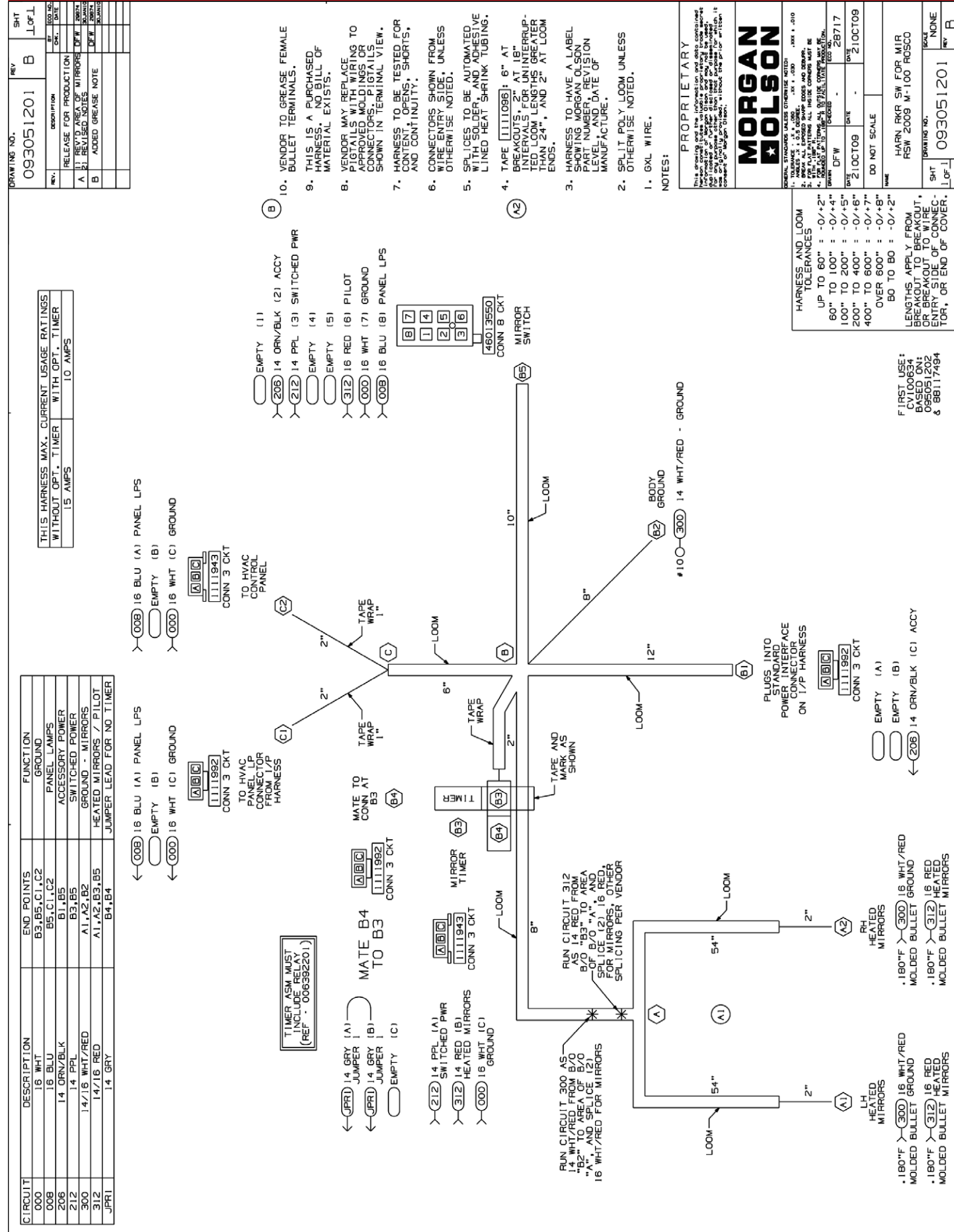
REVISIONS	DATE	BY
1	11OCT09	28598
2	11OCT09	11OCT09
DO NOT SCALE		
NAME		
HARN DA KYLS SPCL		
DR UNLK ONLY		
SCALE	DATE	REV
1 OF 1	092094204	NONE

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"
60 TO 60 : -0/+2"

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

FIRST USE:
CV100526
BASED ON:
094084201





DRAWING NO.	REV	SHT
093093201	B	2 of 2
REV.	DESCRIPTION	BY
A	RELEASE TO PRODUCTION	DATE
B	REV'D DM LP B/O'S	DATE

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 PIGTAILS WITH 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 SHRINK TUBING. HEAT SHRINK BUT 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, AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

NOTES:

PROPRIETARY

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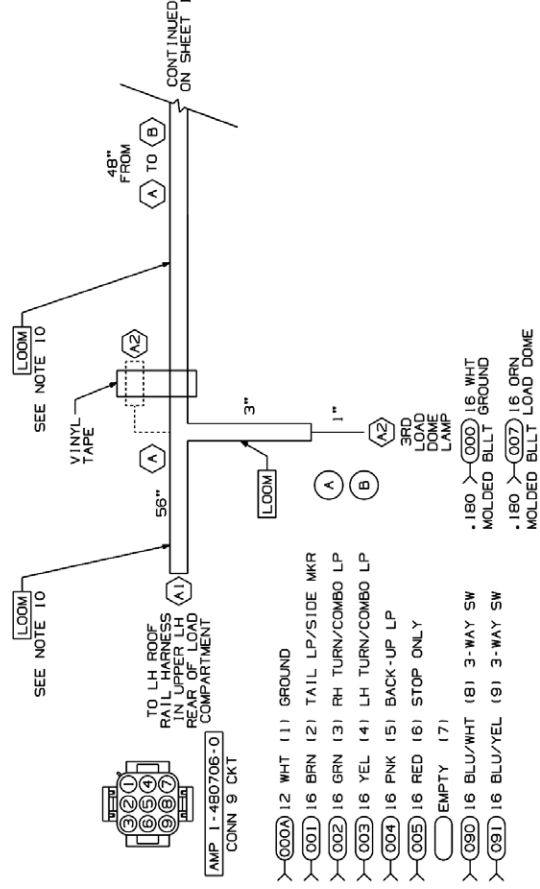


GENERAL STANDARDS UNLESS OTHERWISE NOTED	DATE
1. HARNESS TO BE MADE IN THE U.S.A.	DATE
2. ALL PARTS AND MATERIALS TO BE USED SHALL BE APPROVED BY MORGAN OLSON.	DATE
3. ALL PARTS AND MATERIALS TO BE USED SHALL BE APPROVED BY MORGAN OLSON.	DATE
4. ALL PARTS AND MATERIALS TO BE USED SHALL BE APPROVED BY MORGAN OLSON.	DATE
DATE	DATE
14APR09	26B36
DO NOT SCALE	
NAME	
HARNESS ROOF 13' - 16'6"	
M100 TRUCK - 180F BLT	
DRAWING NO.	
SHT	NONE
REV	B
093093201	

HARNESS AND LOOM TOLERANCES
LP 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 APPLIED TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

SPLICE 1
000A 12 WHT IS TO BE
000B 12 WHT IS TO BE
VENDOR TO DETERMINE
LOCATION(S)

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000A	12 WHT	A1,E1,E2,SPLICE 1	GROUND
000	14/16 WHT	A2,B1,C1,D1,SPLICE 1	GROUND
001	16 BRN	A1,E2	CLERK/ICC LPS
002	16 GRN	A1,E2	RH TURN LP
003	16 YEL	A1,E2	LH TURN LP
004	16 PNK	A1,E2	BACK-UP LPS
005	16 RED	A1,E2	STOP LPS
006	16 TAN	D1,E2	CAB DOME LPS
007	16 ORN	A2,B1,C1,E2	LOAD DOME LPS
008	16 BLU/WHT	A1,E2	3-WAY SWITCH - LOAD DMS
009	16 BLU/YEL	A1,E2	3-WAY SWITCH - LOAD DMS



DRAWING NO.	REV	SHT
093093205	B	1 of 1
REV.	DESCRIPTION	BY
A	RELEASE TO PRODUCTION	DATE
B	REV'D DM LP B/O'S	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 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 [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

NOTES:

PROPRIETARY

This drawing and the information on it are the property of Morgan Olson and shall remain the property of Morgan Olson. No part of this drawing may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Morgan Olson.

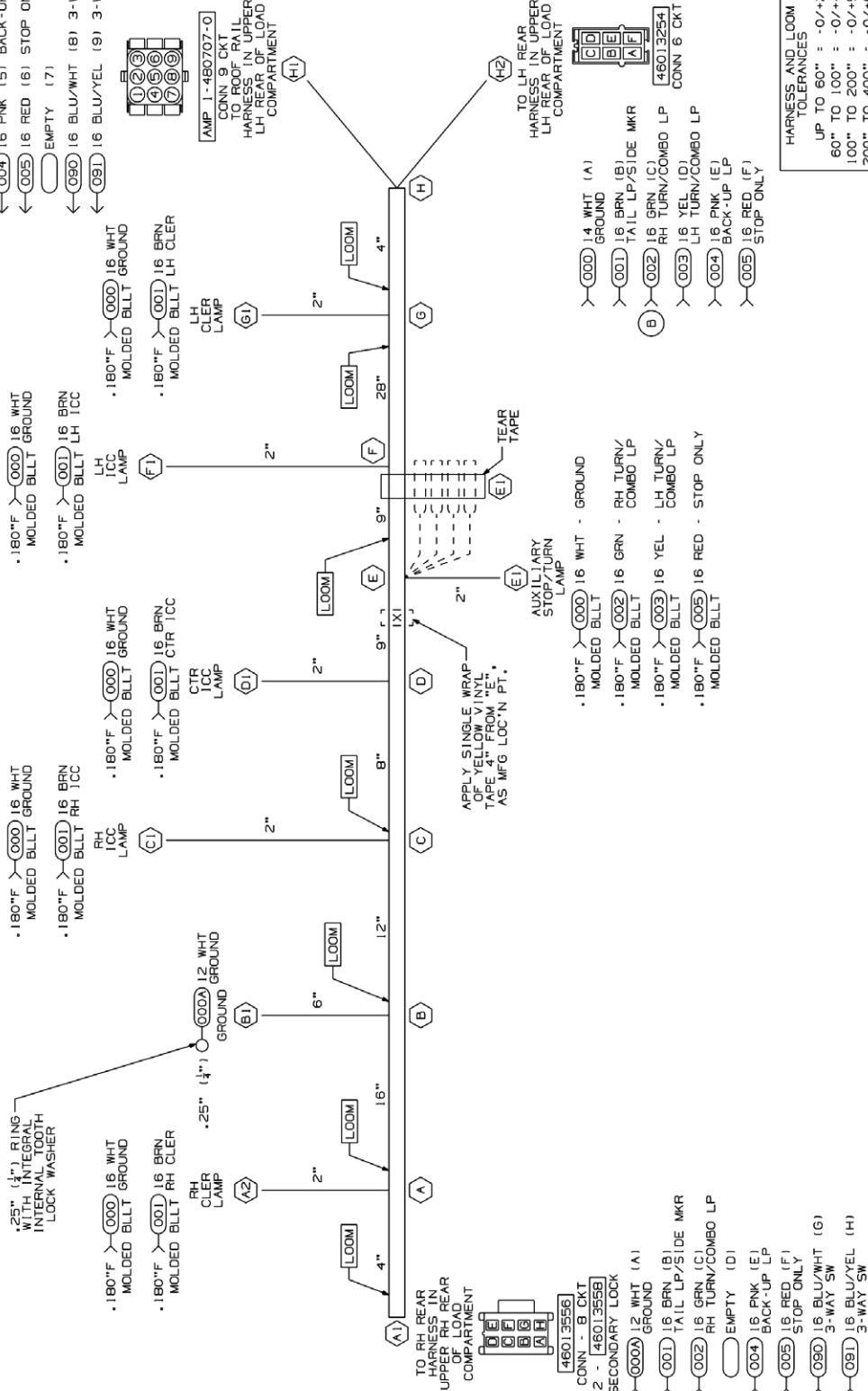


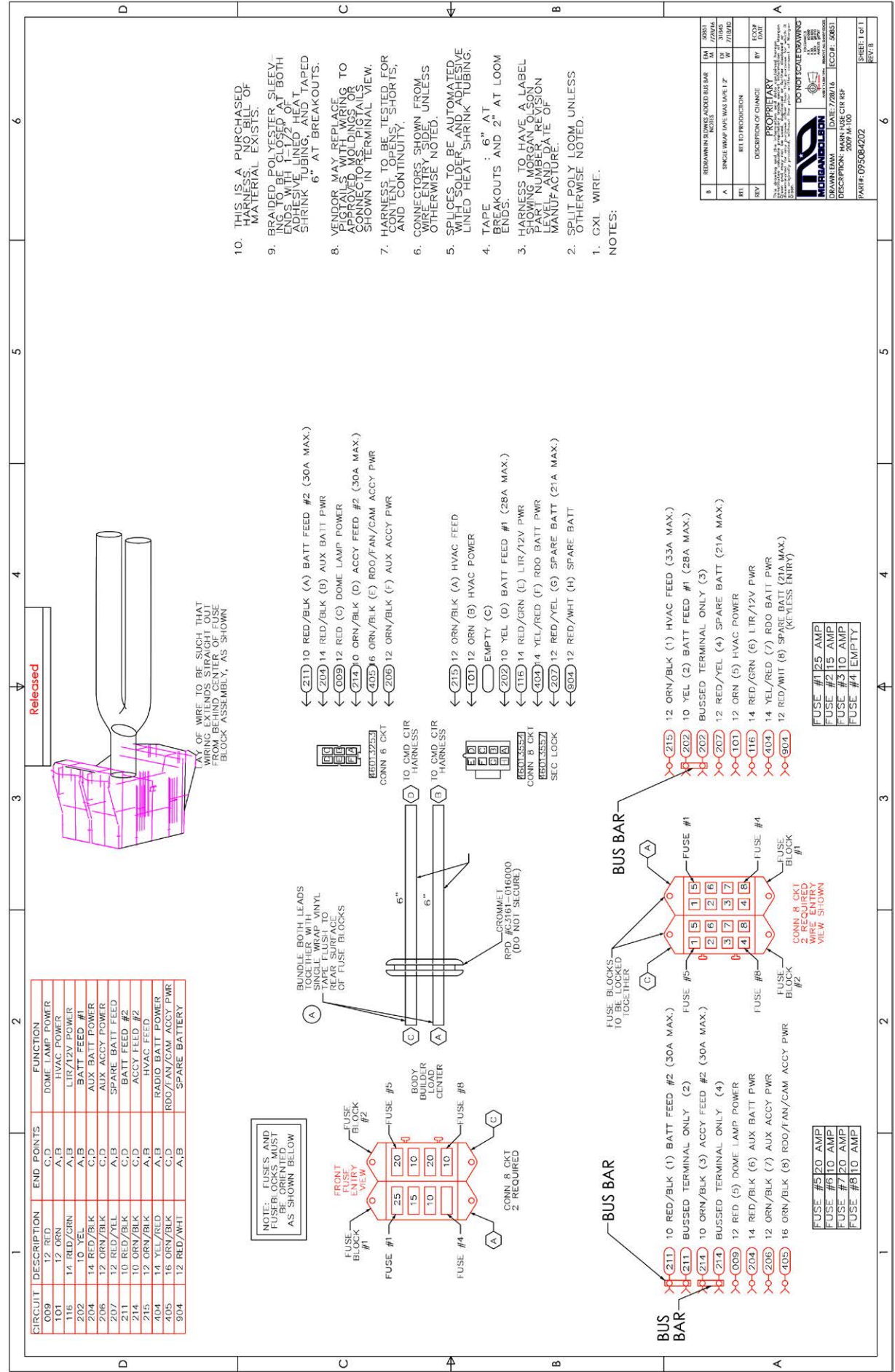
GENERAL STANDARDS UNLESS OTHERWISE NOTED	DATE
1. HARNESS TO BE MADE IN THE U.S.A.	DATE
2. ALL PARTS AND MATERIALS TO BE USED SHALL BE APPROVED BY MORGAN OLSON.	DATE
3. ALL PARTS AND MATERIALS TO BE USED SHALL BE APPROVED BY MORGAN OLSON.	DATE
4. ALL PARTS AND MATERIALS TO BE USED SHALL BE APPROVED BY MORGAN OLSON.	DATE
DATE	DATE
06APR09	26B36
DO NOT SCALE	
NAME	
HARNESS TRANSOM	
CHASSY READY - 180F BLT	
DRAWING NO.	
SHT	NONE
REV	B
093093205	

HARNESS AND LOOM TOLERANCES
LP 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 OR BREAKOUT TO WIRE OR BREAKOUT TO WIRE OR BREAKOUT TO WIRE OR END OF COVER.

SPLICE 1
000A 12 WHT IS TO BE
000B 12 WHT IS TO BE
VENDOR TO DETERMINE
LOCATION(S)

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000A	12 WHT	A1,B1,H1,SPLICE 1	GROUND
000	14/16 WHT	A2,C1,D1,E1,F1,G1,H2,SPLICE 1	GROUND
001	16 BRN	A1,A2,C1,D1,F1,G1,H1,H2	CLERK/ICC/MARKER LAMPS
002	16 GRN	A1,E1,H1,H2	RH TURN/COMBO LP
003	16 YEL	E1,H1,H2	LH TURN/COMBO LP
004	16 PNK	A1,H1,H2	BACK-UP LAMPS
005	16 RED	A1,E1,H1,H2	STOP ONLY LAMPS
006	16 BLU/WHT	A1,H1	3-WAY SWITCH
007	16 BLU/YEL	A1,H1	3-WAY SWITCH





DRAWING NO. **095084204** SHIT **L of 4**
 REV. **B** BY **DK** DATE
 DESCRIPTION: RELEASE FOR PRODUCTION
 A REV'D B/O'S "01&02"
 B 7" WAS 1" AT G1

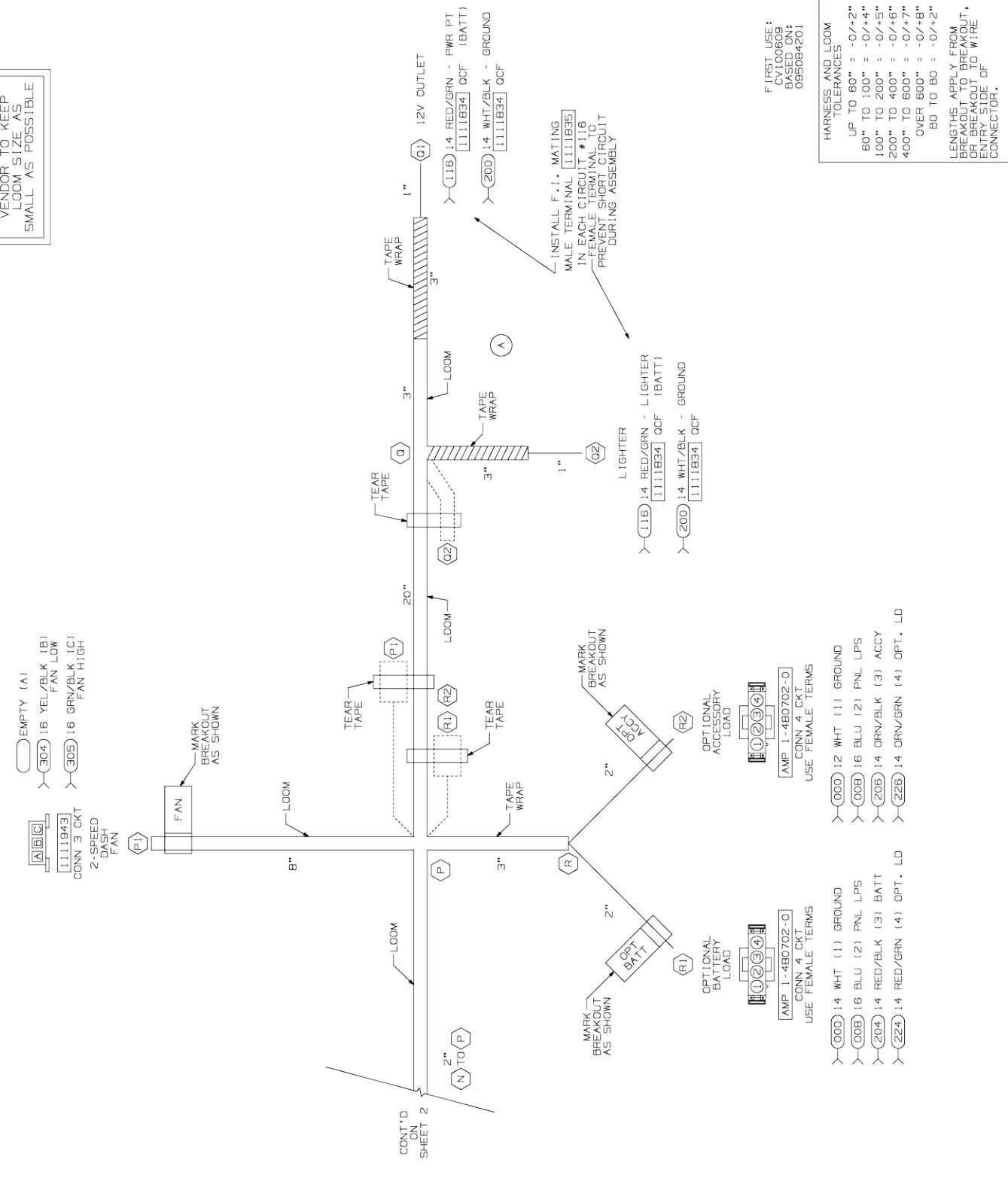
MORGAN MOLSON
 2009 M-100
 DESCRIPTION: MAIN USER CIR REF
 PART: 095084202
 SHEET 1 OF 4

10. THIS IS A PURCHASED MATERIAL. NO BILL OF MATERIAL EXISTS.
9. BRAIDED POLYESTER SLEEVING TO BE CLOSED AT BOTH ENDS WITH 1/2" OF SHRINK TUBING AND TAPED 6" AT BREAKOUTS.
8. VENDOR MAY REPLACE APPROVED MOLDINGS OR CONNECTORS WITH FIGTALS SHOWN IN TERMINAL VIEW. HARNESS TO BE TESTED FOR CONTINUITY.
7. 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 AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL SHOWING MORGAN MOLSON LEVEL AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. CXL WIRE.

- 211 10 RED/BLK (A) BATT FEED #2 (30A MAX.)
 - 209 14 RED/BLK (B) AUX BATT PWR
 - 009 12 RED (C) DOME LAMP POWER
 - 212 0 ORN/BLK (D) ACCY FEED #2 (30A MAX.)
 - 405 16 ORN/BLK (E) RDD/FAN/CAM ACCY PWR
 - 206 12 ORN/BLK (F) AUX ACCY PWR
 - 215 12 ORN/BLK (A) HVAC FEED
 - 101 12 ORN (B) HVAC POWER
 - 116 10 YEL (D) BATT FEED #1 (28A MAX.)
 - 115 14 RED/GRN (L) LIR/12V PWR
 - 404 14 YEL/RED (F) RDD BATT PWR
 - 207 12 RED/YEL (G) SPARE BATT (21A MAX.)
 - 904 12 RED/WHI (H) SPARE BATT
- CONN B CKT TO CMD CTR HARNESS
- CONN B CKT TO CMD CTR HARNESS
- CONN B CKT SEC LOCK
- CONN B CKT SEC LOCK

REV.	DESCRIPTION	BY	LED NO.	CHK.	DATE
A	RELEASE FOR PRODUCTION				
B	REV'D B/O'S "01&02"	DK			
	B 7" WAS 1" AT G1				

VENDOR TO KEEP LOOM SIZE AS SMALL AS POSSIBLE



FIRST USE: 095084204

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.

GEN. STAN. UNLESS OTHERWISE NOTED.
 1. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 2. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 3. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 4. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 5. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 6. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 7. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 8. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 9. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.
 10. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE TO CENTERLINE.

NOTES:
 9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
 10. THIS IS A PURCHASED MATERIAL. NO BILL OF MATERIAL EXISTS.

VENDOR MAY REPLACE APPROVED MOLDINGS OR CONNECTORS WITH FIGTALS SHOWN IN TERMINAL VIEW. HARNESS TO BE TESTED FOR CONTINUITY.

CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.

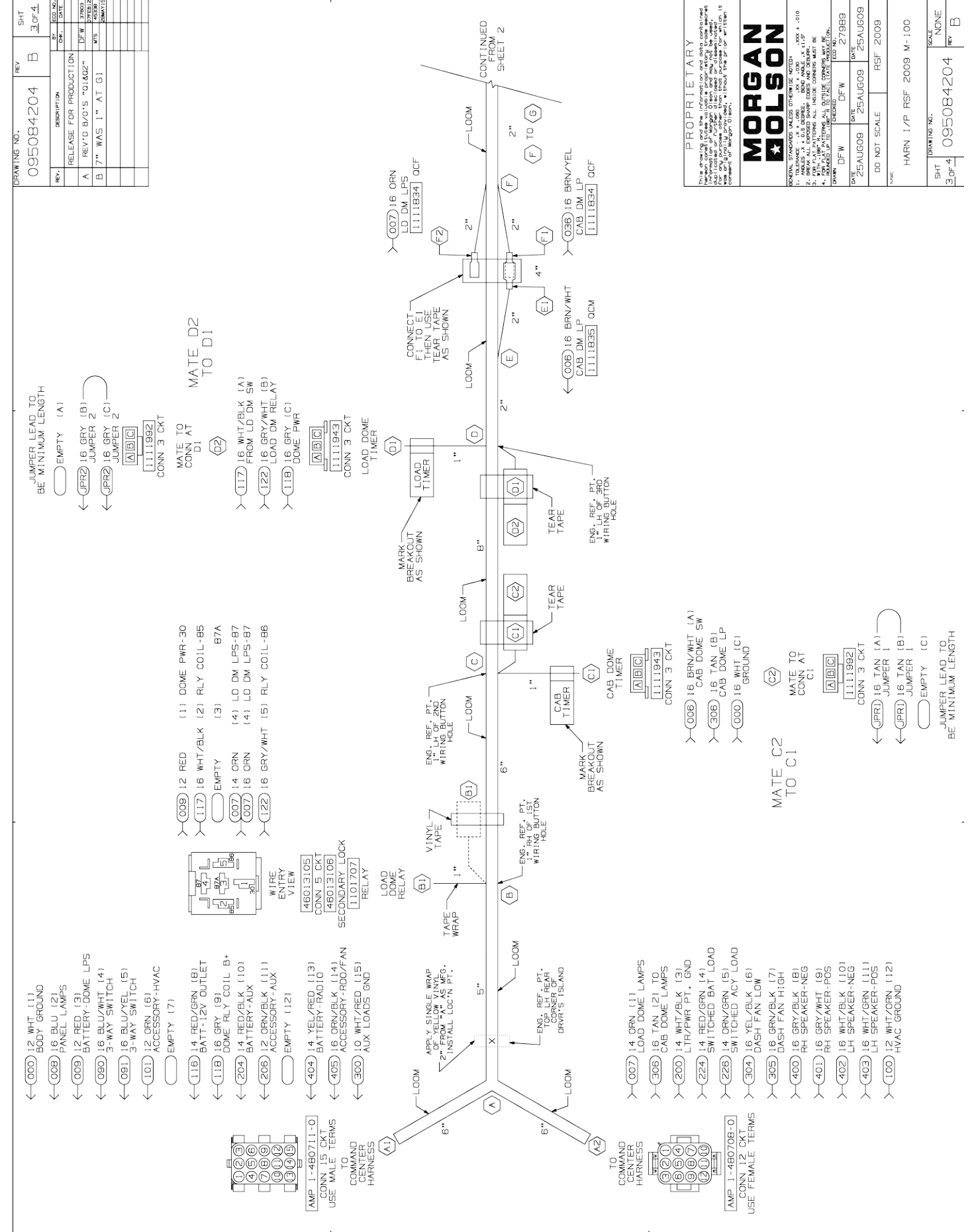
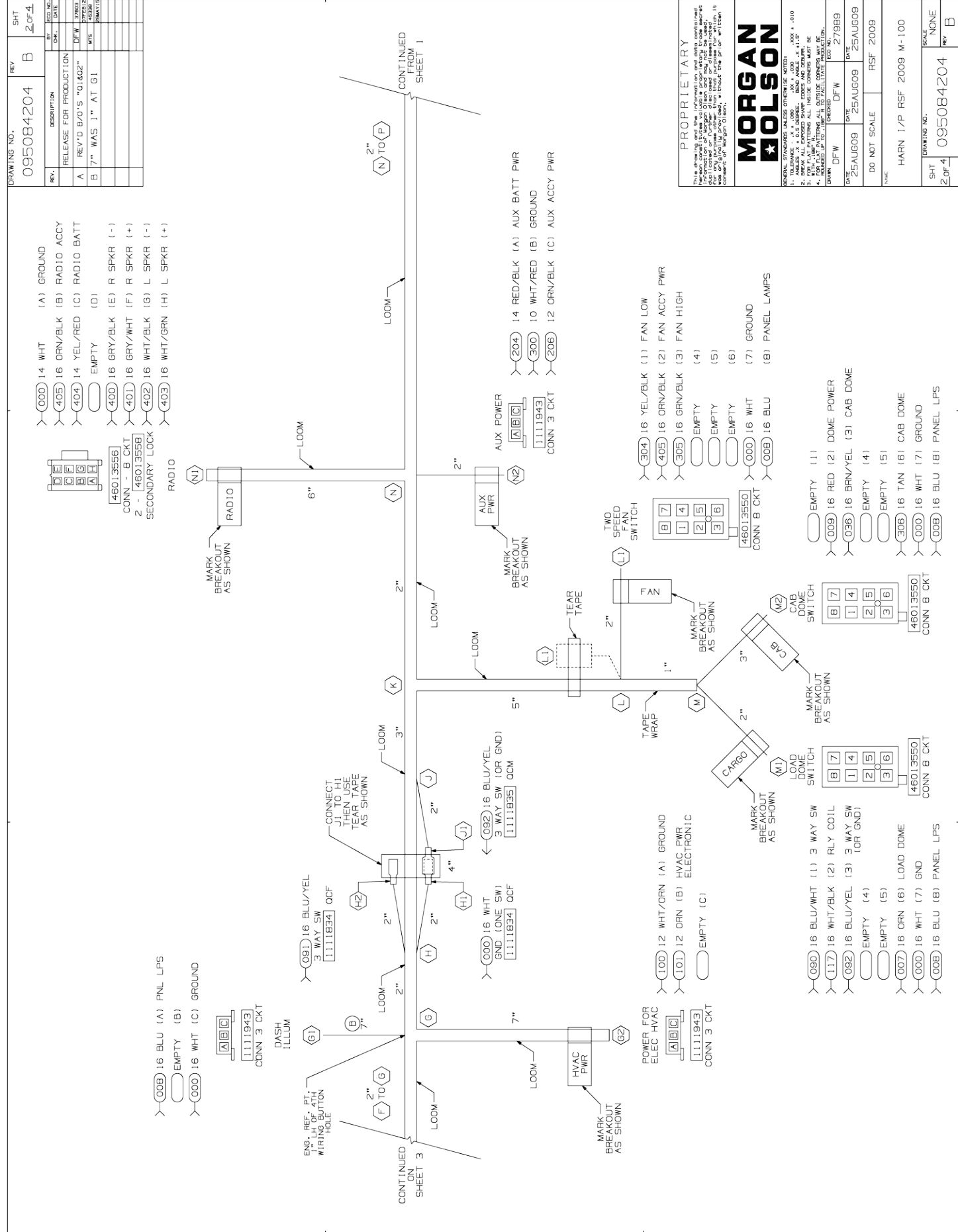
SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.

TAPE (1111098): 6" AT BREAKOUTS AND 2" AT LOOM ENDS.

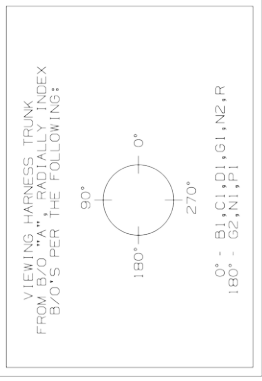
HARNESS TO HAVE A LABEL SHOWING MORGAN MOLSON LEVEL AND DATE OF MANUFACTURE.

SPLIT POLY LOOM UNLESS OTHERWISE NOTED.

GXL WIRE.



DRAWING NO.		REV	SHT
095084204		B	4 of 4
REV	DESCRIPTION	DATE	BY
A	RELEASE FOR PRODUCTION		
B	REV'D B/O'S "01,02"		
	7" WAS 1" AT 01		
	01,01,01,01,01,01,01,01,01,01		



CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	12/14/16 WHT	A1,C1,G1,H1,L1,L1,M1,M2,N1,R1,R2	GROUND
005	16 BRN/WHT	C1,E1	CAB DOME LAMP (PRE-TIMER)
007	14/16 ORN	A2,B1,B1,F2,M1	LOAD DOME LAMP(S)
009	16 BLU	A1,G1,L1,M1,W2,R1,R2	DASH ILLUMINATION
009	12/16 RED	F1,M2	DOME BATTERY FEED
036	16 BRN/YEL	A1,M1	CAB DOME LAMP (SWITCHED)
090	16 BLU/WHT	A1,H2	LOAD DM 3W SW
091	16 BLU/YEL	J1,M1	LOAD DM 3W SW
092	16 WHT/ORN	A2,G2	HVAC GROUND
100	12 ORN	A1,G2	ELEK HVAC POWER
116	14 RED/GRN	A1,G1,G2	LIGHTER/12V OUTLET
117	16 WHT/BLK	B1,D1,M1	LD DM RELAY COIL GND
118	16 GRN	A1,D1	LD DM RELAY COIL
122	16 GRN/WHT	B1,D1	LD DM RELAY COIL
200	14 WHT/BLK	A2,G1,G2	AUX BATTERY POWER
204	14 RED/BLK	A1,N2,R1	AUX ACCESSORY POWER
206	12/14 ORN/BLK	A1,N2,R2	SWITCHED BATTERY LOADS
224	14 RED/GRN	A2,R2	SWITCHED ACCESSORY LOADS
226	14 ORN/GRN	A1,N2	AUXILIARY LOADS GND
300	10 WHT/RED	A2,L1,P1	DASH FAN LOW
304	16 YEL/BLK	A2,L1,P1	DASH FAN HIGH
305	16 GRN/BLK	A2,D1,W2	CAB DOME LAMP (POST TIMER)
306	16 TAN	A2,N1	RR SPEAKER (-)
400	16 GRN/BLK	A2,N1	RR SPEAKER (+)
401	16 GRN/WHT	A2,N1	LH SPEAKER (-)
402	16 WHT/BLK	A2,N1	LH SPEAKER (+)
403	16 WHT/GRN	A1,N1	RADIO BATTERY POWER
404	14 YEL/RED	A1,N1	ROD/FAN/CAM ACCY POWER
405	16 ORN/BLK	A1,L1,N1	CAB DOME JUMPER
JPR1	16 TAN	C2,C2	LOAD DOME JUMPER
JPR2	16 GRN	D2,D2	LOAD DOME 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

MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED

1. MATERIALS - U.S.A. ORIGIN - UNLESS OTHERWISE NOTED
 2. DIMENSIONS - U.S. DIMENSIONS - UNLESS OTHERWISE NOTED
 3. FINISH - ALL EXPOSED SURFACES SHALL BE FINISHED TO THE STANDARD OF THE MORGAN OLSON CORPORATION
 4. TOLERANCES - UNLESS OTHERWISE NOTED, ALL DIMENSIONS SHALL BE TO THE CLOSEST FRACTION OF 0.001 INCH
 5. DIMENSIONS - UNLESS OTHERWISE NOTED, ALL DIMENSIONS SHALL BE TO THE CLOSEST FRACTION OF 0.001 INCH

DATE: 05/25/09

DESIGNED BY: 25AUG09

DRAWN BY: 27989

DO NOT SCALE

SCALE: AS SHOWN

RF 2009

HARN 1/P RSF 2009 M-100

TITLE: NONE

REV: 4

095084204

REV: B

DRAWING NO.

095088201

REV

A

SHT

1 of 2

DESCRIPTION

RELEASE FOR PRODUCTION

DATE

BY

A

DATE

10/18/09

DRAWN

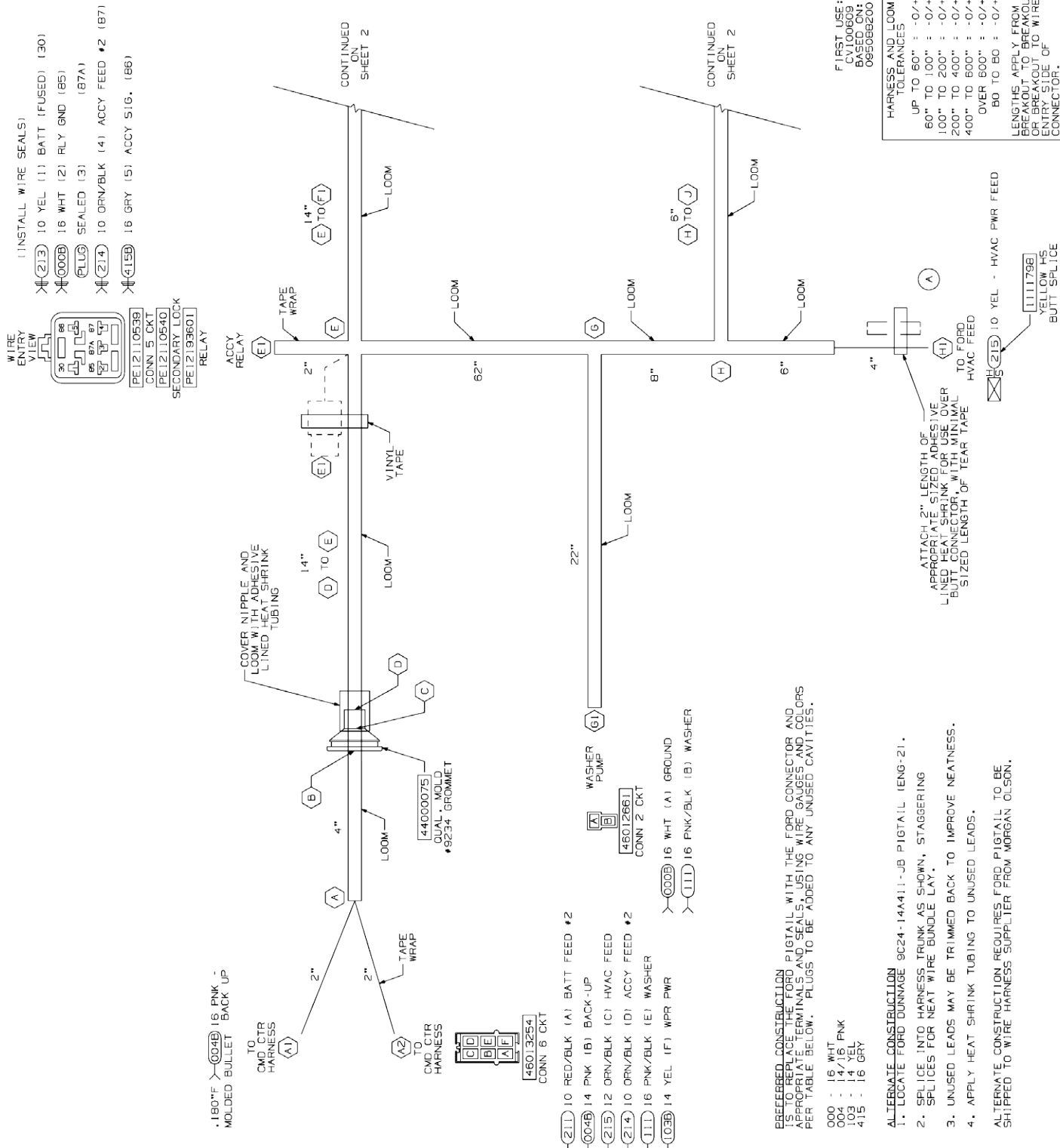
A

DATE

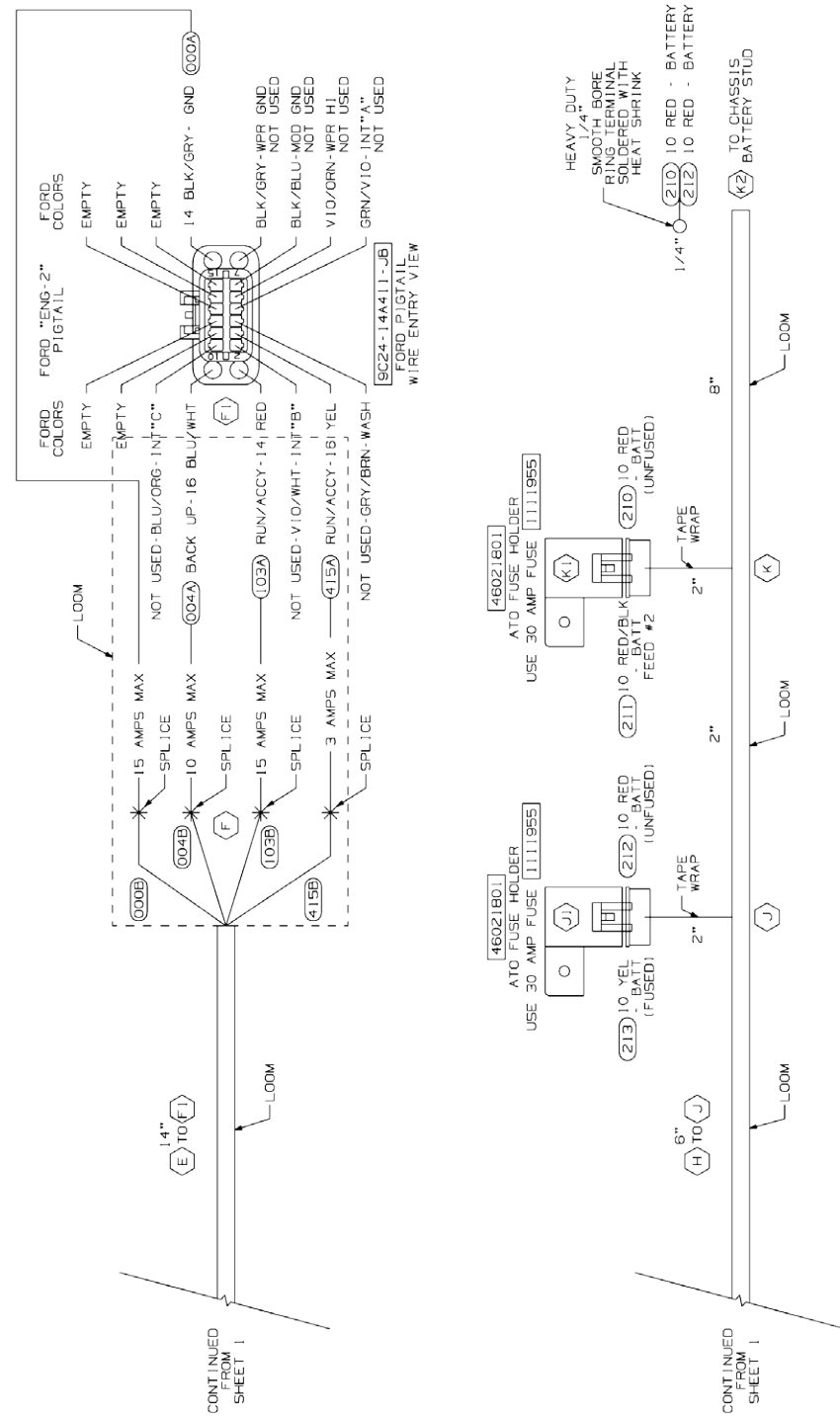
10/18/09

SCALE

AS SHOWN



DRAWING NO.	REV	SHT
095088201	A	2 of 2
DESCRIPTION	BY	DATE
RELEASE FOR PRODUCTION		
A BURT SPILICE WAS 400/2817 CONN	JAL	11/09/11



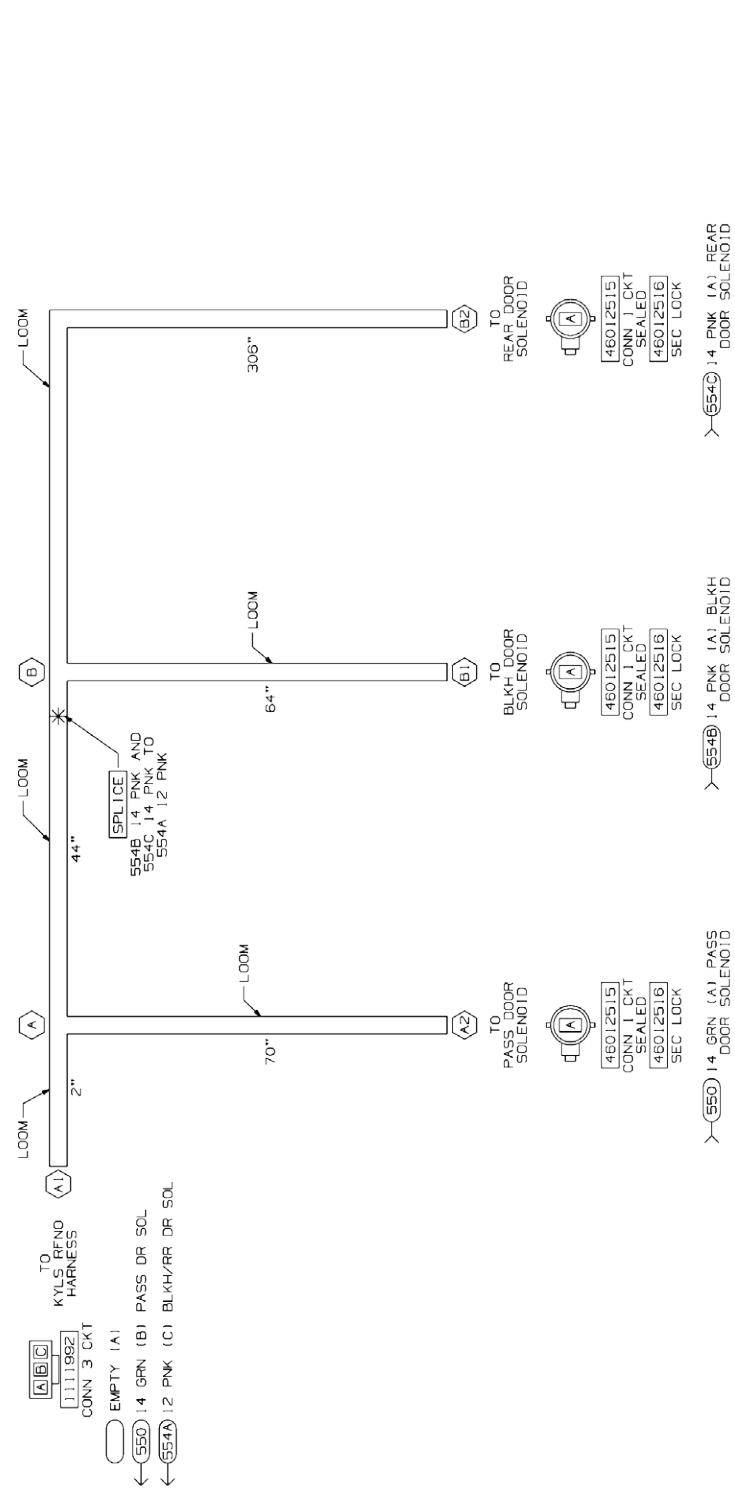
THIS HARNESS IS FOR WIPERS, BACK-UP, HVAC ACCESSORY POWER. IT BE INSTALLED BETWEEN THE FORD WIPER CONNECTION UNDER THE HOOD, THE CHASSIS BATTERY, THE CHASSIS HEATER POWER SOURCE (JUST BEHIND THE BATTERY), THE WIPER/WASHER RESERVOIR, AND THE FORD COMMAND CENTER HARNESS IN THE LH TOEBOARD AREA.

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000A	14 BLK/GRY	F,F1	GROUND
000B	16 WHT	E1,F,G1	GROUND
004A	16 BLU/WHT	F,F1	BACK-UP
004B	14/16 PNK	A1,A2,F	BACK-UP
103A	14 RED	F,F1	WIPER POWER
103B	14 YEL	A2,F	WIPER POWER
111	16 PNK/BLK	A2,G1	WASHER
210	10 RED	K1,K2	BATTERY (UNFUSED)
211	10 RED/BLK	A2,K1	BATT FEED #2
212	10 RED	J1,K2	BATTERY (UNFUSED)
213	10 YEL	E1,J1	BATTERY (FUSED)
214	10 ORN/BLK	A2,E1	ACQY FEED #2
215	12 ORN/BLK	A2,H1	HVAC FEED
415A	16 YEL	F,F1	ACCT SIGNAL
415B	16 GRY	E1,F	ACQY SIGNAL

• SEE NOTES

PROPRIETARY
THIS DRAWING AND THE INFORMATION ON AND THIS CONTAINS THE PROPRIETARY INFORMATION OF MORGAN NOLSON PARTS AND SHALL BE KEPT CONFIDENTIAL AND NOT BE REPRODUCED OR TRANSMITTED 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.
MORGAN NOLSON
GENERAL STANDARDS UNLESS OTHERWISE NOTED
1. WIRE GAUGE: AWG
2. WIRE COLOR: AS SHOWN
3. WIRE STRANDING: UNLESS OTHERWISE NOTED
4. END OF PARTS TO BE IDENTIFIED BY DATE AND TIME
DATE: 19AUG09
DFW
27989
DO NOT SCALE
2009 RSF
HARN WPR/ENG RSF
2009 M-100
DRAWING NO.
095088201
SHT
2 of 2
SCALE
INDNE
REV
A

DRAWING NO.	REV	SHT
110094202		1 of 1
DESCRIPTION	BY	DATE
RELEASE FOR PRODUCTION		



- 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 SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [1111096]: 6" AT BREAKOUTS, 2" AT 18" INTERVALS, 1" AT 24" AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL IDENTIFYING ORIGINAL PART NUMBER, DIVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

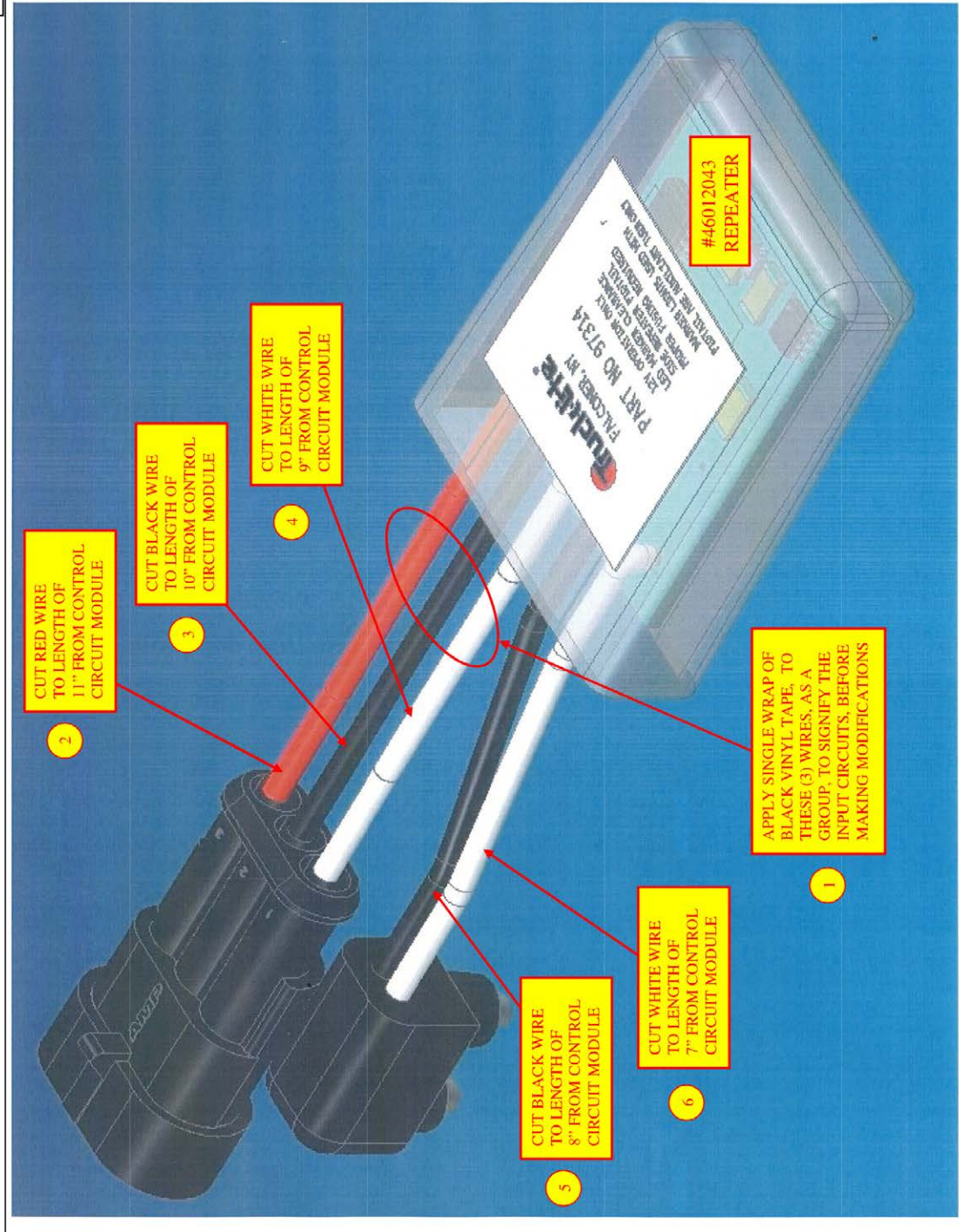
NOTES:

PROPRIETARY
THIS DRAWING AND THE INFORMATION ON AND THIS CONTAINS THE PROPRIETARY INFORMATION OF MORGAN NOLSON PARTS AND SHALL BE KEPT CONFIDENTIAL AND NOT BE REPRODUCED OR TRANSMITTED 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.
MORGAN NOLSON
GENERAL STANDARDS UNLESS OTHERWISE NOTED
1. WIRE GAUGE: AWG
2. WIRE COLOR: AS SHOWN
3. WIRE STRANDING: UNLESS OTHERWISE NOTED
4. END OF PARTS TO BE IDENTIFIED BY DATE AND TIME
DATE: 11JUL11
DFW
35621
DO NOT SCALE
HARN KYLS RF GEN
PASS BLKH 1B' MAX RR
DRAWING NO.
110094202
SHT
1 of 1
SCALE
INDNE
REV
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"
80 TO 80 : -0/+2"
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE FOR STRIPPED END OF COVER FOR, OR END OF COVER.

FIRST USE: C.V.L. LOOM BASED ON: 095084204

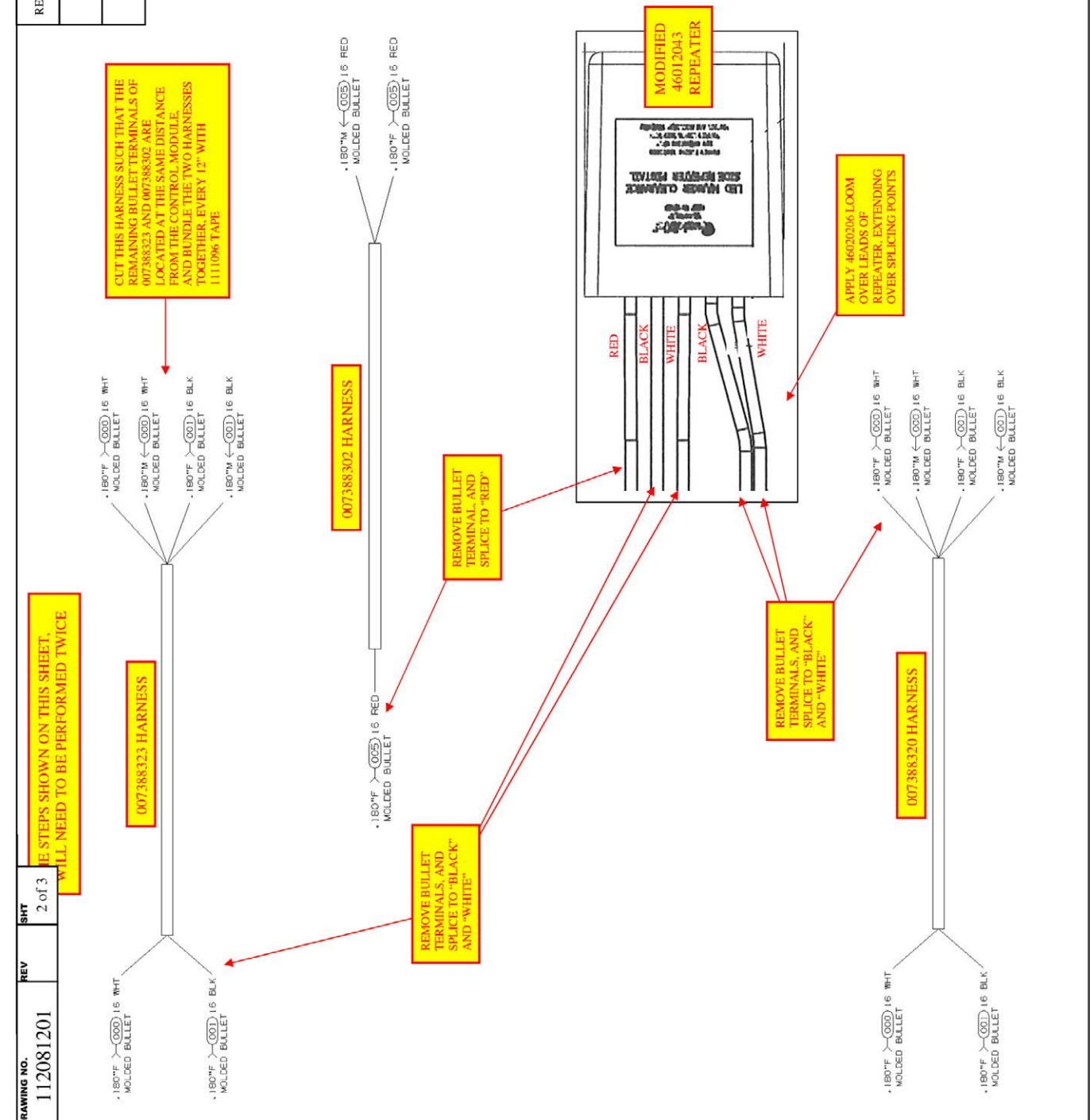
REV	DESCRIPTION	BY	REL. NO
	RELEASE TO PRODUCTION	CHK.	DATE
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THE STEPS SHOWN ON THIS SHEET, WILL NEED TO BE PERFORMED TWICE

DRAWING NO.	SHT
112081201	1 of 3

REV	DESCRIPTION	BY	REL. NO
	RELEASE TO PRODUCTION	CHK.	DATE
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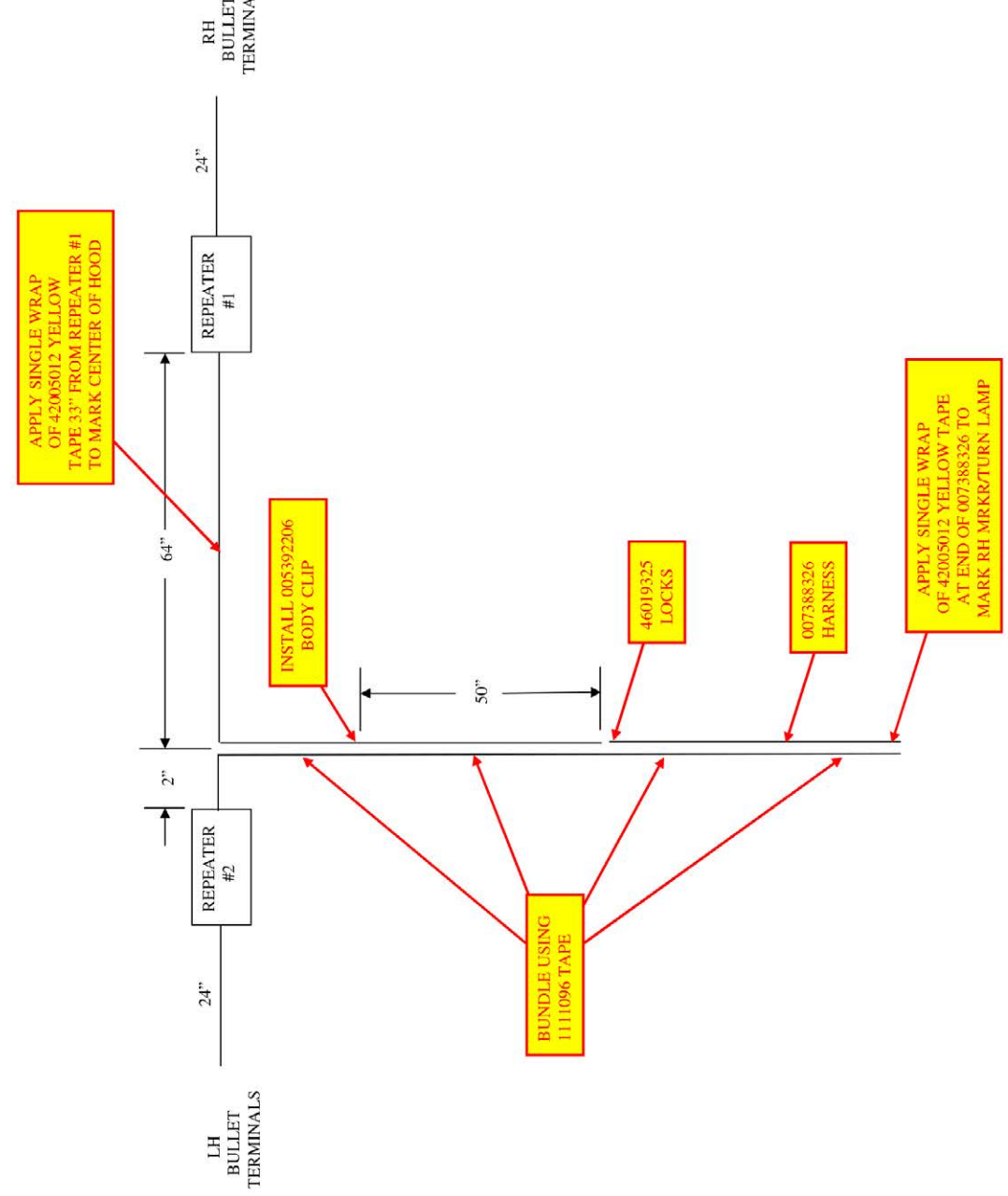


THE STEPS SHOWN ON THIS SHEET, WILL NEED TO BE PERFORMED TWICE

DRAWING NO.	SHT
112081201	2 of 3

DRAWING NO. 112081201	REV 3 of 3	SHT 3 of 3	DESCRIPTION RELEASE TO PRODUCTION	BY CHK.	RELNO. DATE
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ASSEMBLE THE TWO PREVIOUSLY FABRICATED HARNESSSES, ALONG WITH THE OTHER LISTED ITEMS AS SHOWN BELOW



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 ANGLES: .X ± .5 DEGREES
 2. BREAK ALL EXPOSED SHARP EDGES AND DEBURR.
 FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R.
 3. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

DRAWN	DFW	CHECKED	-	RELEASE NO.	35922
DATE	07AUG11	DATE	-	DATE	07AUG11

DO NOT SCALE
 NAME
HARN M/BODY MRKR/TURNS W/ REPEATERS

SHT	3 of 3	DRAWING NO.	112081201	SCALE	NONE
REV					

DRAWING NO.	115084206	REV	J OF 5
DESCRIPTION		RELEASE FOR PRODUCTION	

VENDOR TO KEEP LOOM SIZE AS SMALL AS POSSIBLE

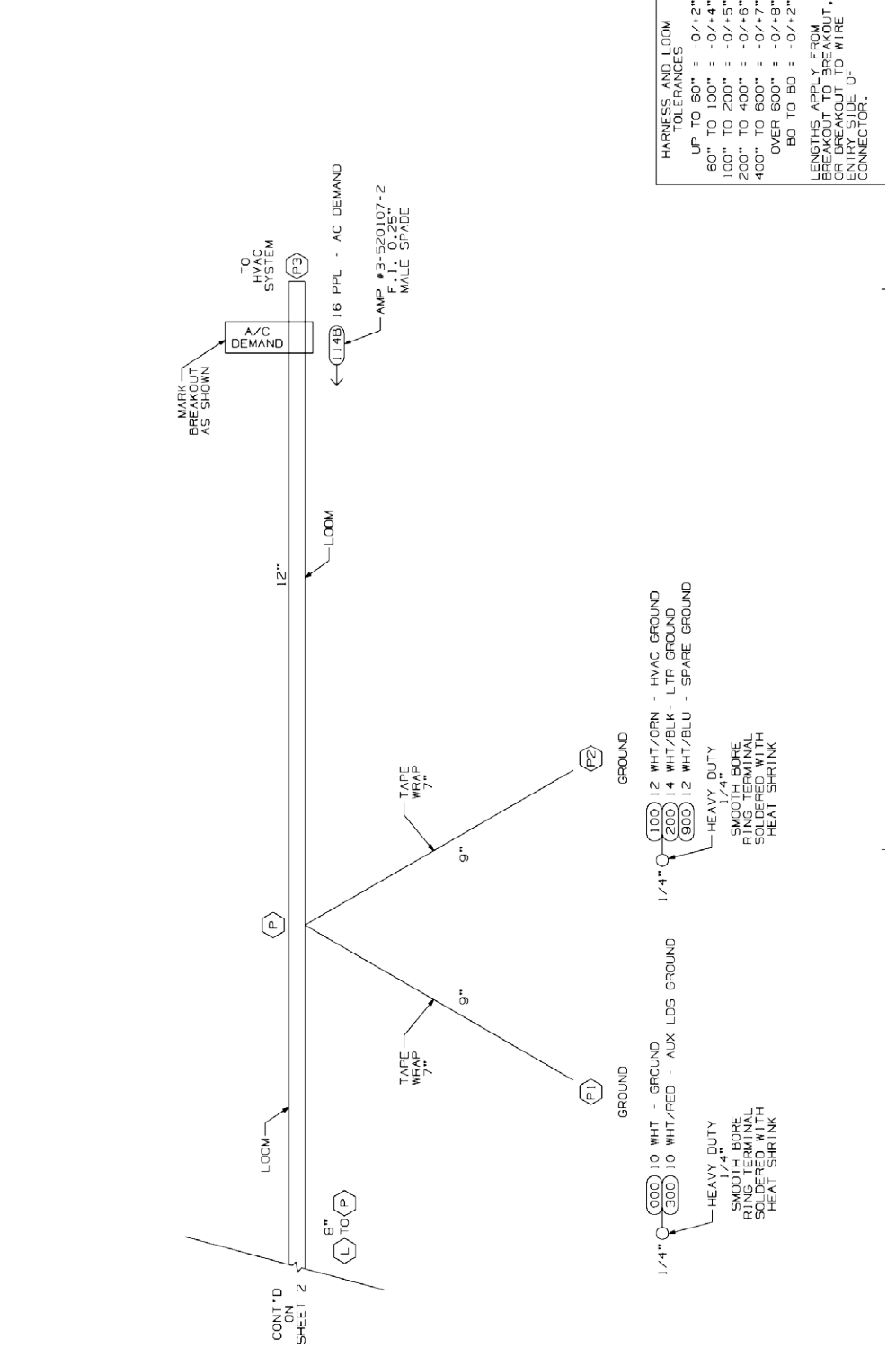
- THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW, UNLESS OTHERWISE NOTED.
- HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM WIRE ENTRY SIDE,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

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DRAWN	DFW	CHECKED	-	RELEASE NO.	35327
DATE	14JUN11	DATE	-	DATE	14JUN11

HARN COM CTR RSR	201	M-100	
1/P TO RP W/ MOD MFR SW		NONE	
DRAWING NO.	115084206	REV	J OF 5



DRAWING NO.	115084206	REV	2 OF 5
DESCRIPTION	RELEASE FOR PRODUCTION	BY	DATE
REV.		DATE	

PREFERRED CONSTRUCTION IS TO RELOCATE THE FORD PIGTAIL WITH THE FORD CONNECTOR AND APPROPRIATE TERMINALS, USING WIRE GAUGES AND COLORS PER TABLE BELOW.

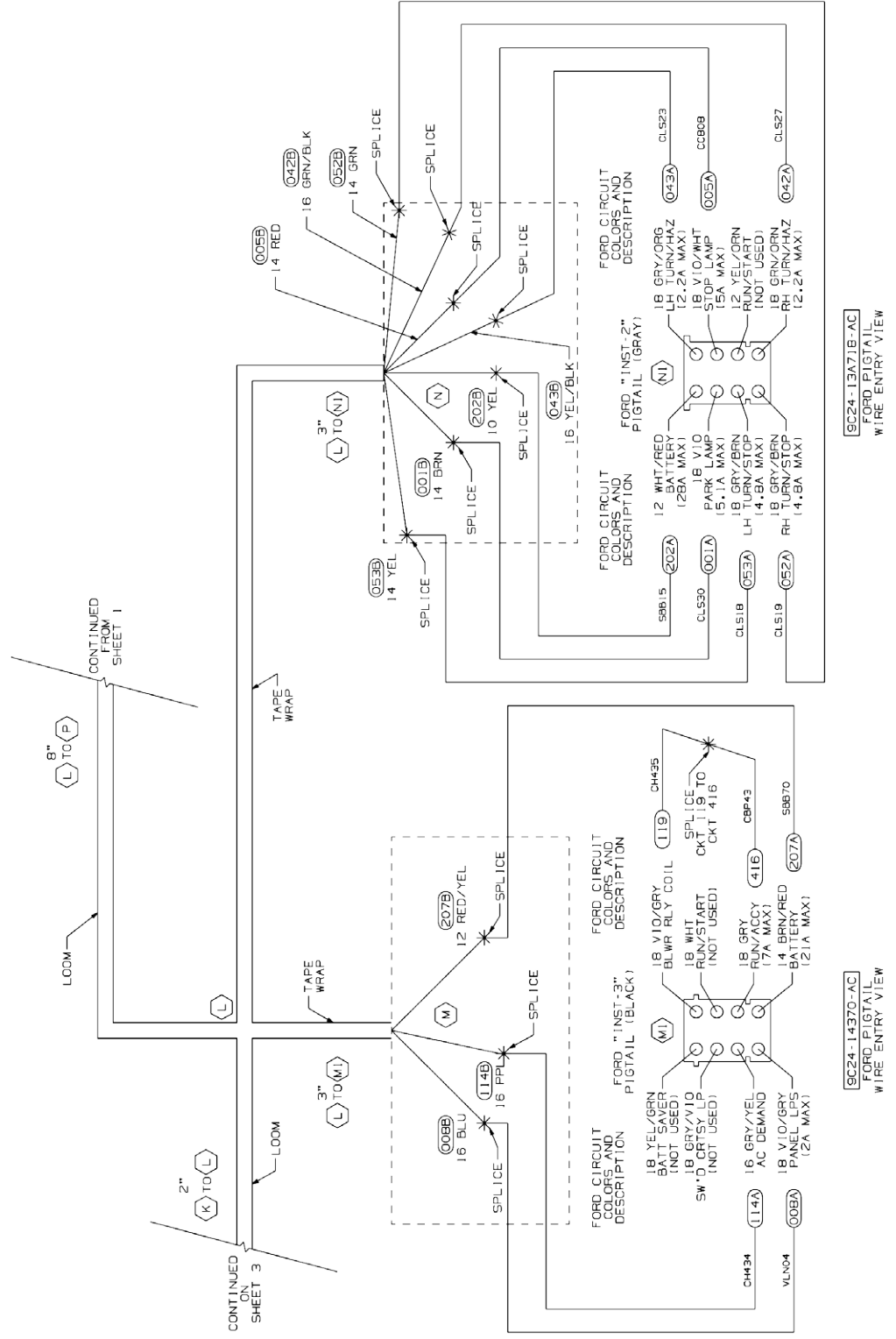
001	: 14/16 BRN	042	: 16 GRN/BLK
005	: 14 RED	043	: 16 YEL/BLK
202	: 10 YEL	052	: 14 GRN
053	: 14 YEL		

- ALTERNATE CONSTRUCTION
1. LOCATE FORD DUNNAGE 9C24-13A718-AC PIGTAIL (INST-21).
 2. SPLICE INTO HARNESS TRUNK AS SHOWN, STAGGERING SPLICES FOR NEAT WIRE BUNDLE LAY.
 3. UNUSED LEADS MAY BE TRIMMED BACK TO IMPROVE NEATNESS.
 4. APPLY HEAT SHRINK TUBING TO UNUSED LEADS.
- ALTERNATE CONSTRUCTION REQUIRES FORD PIGTAIL TO BE SHIPPED TO WIRE HARNESS SUPPLIER FROM MORGAN OLSON.

PREFERRED CONSTRUCTION IS TO RELOCATE THE FORD PIGTAIL WITH THE FORD CONNECTOR AND APPROPRIATE TERMINALS, USING WIRE GAUGES AND COLORS PER TABLE BELOW.

008	: 16 BLU	119	: 16 GRN
207	: 12 RED/YEL	416	: 16 GRN

- ALTERNATE CONSTRUCTION
1. LOCATE FORD DUNNAGE 9C24-14370-AC PIGTAIL (INST-3).
 2. SPLICE INTO HARNESS TRUNK AS SHOWN, STAGGERING SPLICES FOR NEAT WIRE BUNDLE LAY.
 3. UNUSED LEADS MAY BE TRIMMED BACK TO IMPROVE NEATNESS.
 4. APPLY HEAT SHRINK TUBING TO UNUSED LEADS.
- ALTERNATE CONSTRUCTION REQUIRES FORD PIGTAIL TO BE SHIPPED TO WIRE HARNESS SUPPLIER FROM MORGAN OLSON.



9C24-14370-AC FORD PIGTAIL WIRE ENTRY VIEW

9C24-13A718-AC FORD PIGTAIL WIRE ENTRY VIEW

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DATE	14JUN11	DATE	14JUN11
BY	RLC	DATE	35327
REV		DATE	RSF 2011

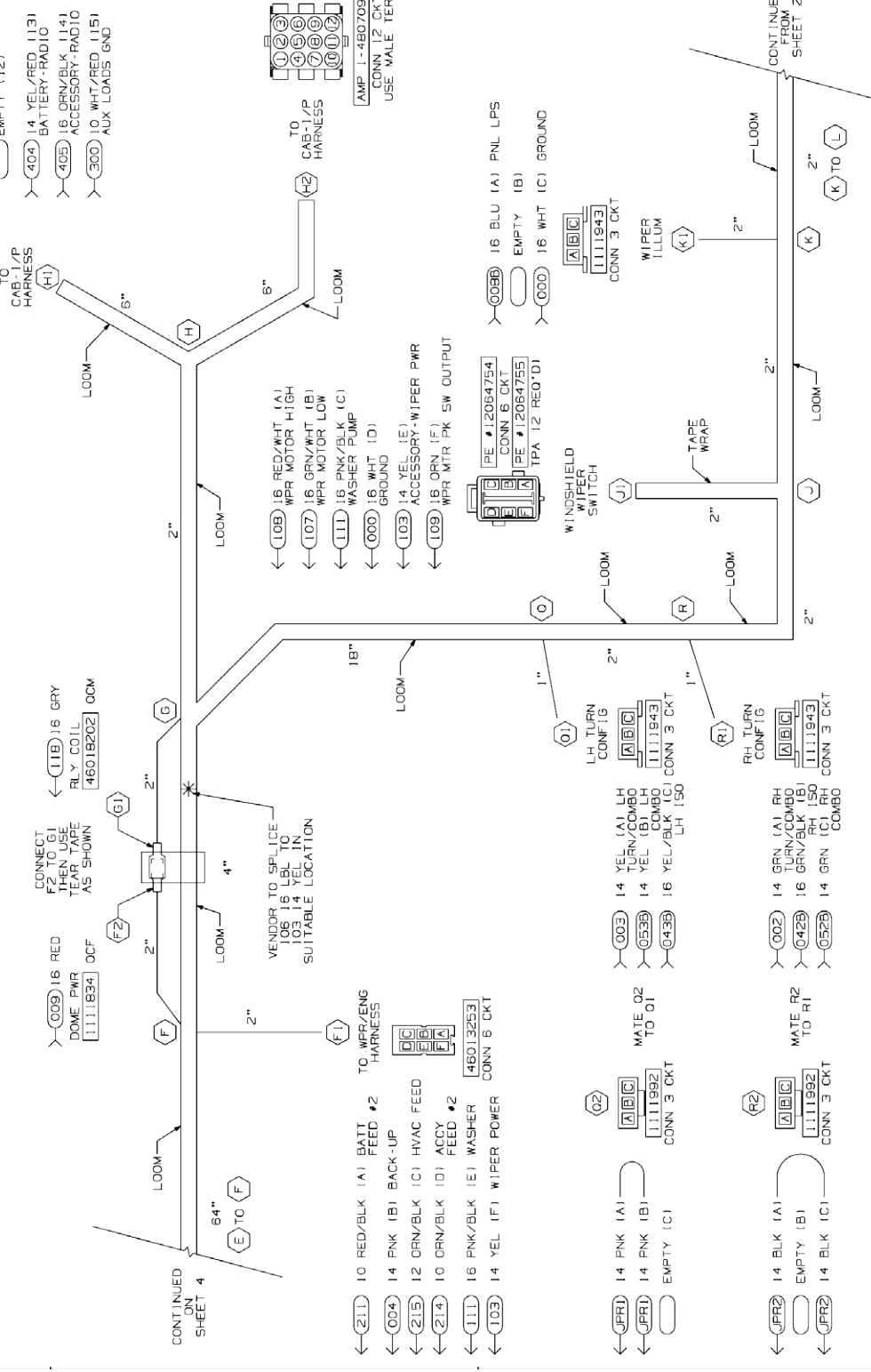
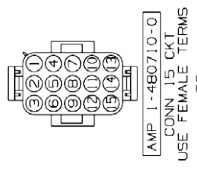
HARN COM CTR RSF
 1/P TO RP W/ MOD WPR SW

DRAWING NO. 115084206

SHT 2 OF 5

DRAWING NO.	115084206	REV	3 OF 5
DESCRIPTION	RELEASE FOR PRODUCTION	BY	DATE
REV.		DATE	

- > (000) 12 WHI GROUND
- > (008) 16 BLU (2) PANEL LAMPS
- > (009) 12 RED (3) BATTERY-DOME LPS
- > (090) 16 BLU/WHI (4) 3-WAY SWITCH
- > (091) 16 BLU/YEL (5) 3-WAY SWITCH
- > (101) 12 GRN (6) ACCESSORY-HVAC
- > () EMPTY (7)
- > (118) 14 RED/GRN (8) BATT-12V OUTLET
- > (119) 16 GRN (9) DOME RLY COIL B+
- > (204) 14 RED/BLK (10) BATTERY-AUX
- > (206) 12 GRN/BLK (11) ACCESSORY-AUX
- > () EMPTY (12)
- > (404) 14 YEL/RED (13) BATTERY-RADIO
- > (405) 16 GRN/BLK (14) ACCESSORY-RADIO
- > (300) 10 WHI/RED (15) AUX LOADS GND



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DATE	14JUN11	DATE	14JUN11
BY	RLC	DATE	35327
REV		DATE	RSF 2011

HARN COM CTR RSF
 1/P TO RP W/ MOD WPR SW

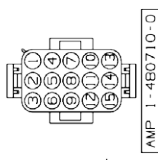
DRAWING NO. 115084206

SHT 3 OF 5

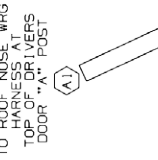
REV.	DESCRIPTION	BY	CHK.	DATE
1	115084206			

- > (211) 10 RED/BLK (A) BATT FEED #2
- > (204) 14 RED/BLK (B) AUX BATT PWR
- > (009) 12 RED (C) DOME LAMP POWER
- > (214) 10 ORN/BLK (D) ACCY FEED #2
- > (405) 16 ORN/BLK (E) RDD/FAN/CAM ACCY PWR
- > (206) 12 ORN/BLK (F) AUX ACCY PWR

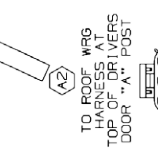
- > (400) 16 GRN/BLK (A) RH SPEAKER-NEG
- > (401) 16 GRN/WHT (B) RH SPEAKER-POS
- > (402) 16 WHT/BLK (C) LH SPEAKER-NEG
- > (403) 16 WHT/GRN (D) LH SPEAKER-POS



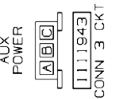
- > (000) 10 WHT (1) GROUND
- > (001B) 16 BRN (2) CLERK/ICC LPS
- > (004) 16 PNK (3) BACK-UP 51G
- > (106) 16 BLK (4) WIPER PARK B+
- > (107) 16 GRN/WHT (6) WIPER MOTOR LOW
- > (108) 16 RED/WHT (7) WIPER MOTOR HIGH
- > (109) 16 WHT (8) WIPER MOTOR PARK SW OUT
- > (224) 14 RED/GRN (10) BATT
- > (300) 12 WHT/RED (11) GND
- > (226) 14 ORN/GRN (12) ACCY FAN LOW
- > (304) 16 YEL/BLK (13) FAN LOW
- > (305) 16 GRN/BLK (14) FAN HIGH
- > (405) 16 ORN/BLK (15) ACCY INO SWITCH



- > (000) 10 WHT (1) GROUND
- > (001B) 14 BRN (2) TAIL LP/SIDE MKR
- > (002) 14 GRN (3) RH TURN/COMBO LP
- > (003) 14 YEL (4) LH TURN/COMBO LP
- > (004) 14 PNK (5) BACK-UP LP
- > (005B) 14 RED (6) STOP ONLY
- > (306) 16 TAN (7) CAB DOME LP
- > (000) 16 BLU/WHT (8) 3-WAY SW
- > (001) 16 BLU/YEL (9) 3-WAY SW
- > (224) 14 RED/GRN (10) ACCY SWITCHED
- > (007) 14 ORANGE (11) LOAD DOME LAMPS
- > (226) 14 ORN/GRN (12) BATT SWITCHED



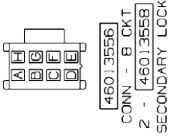
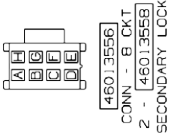
- > (204) 14 RED/BLK (A) BATT-AUX 1
- > (300) 10 WHT/RED (B) GROUND
- > (206) 12 ORN/BLK (C) ACCY-AUX 2



- > (500) 12 WHT/BLU (A) GROUND
- > (504) 12 RED/WHT (B) SPARE BATT



- > (215) 12 ORN/BLK (A) HVAC FEED
- > (107) 12 ORN (B) HVAC POWER
- > (209) 10 YEL (D) BATT FEED #1
- > (116) 14 RED/GRN (E) LTR/12V PWR
- > (404) 14 YEL/RED (F) RDD BATT PWR
- > (207B) 12 RED/YEL (G) SPARE BATT FEED
- > (304) 12 RED/WHT (H) SPARE BATT LOAD



CONTINUED
FROM
SHEET 3

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DRAWING NO.	115084206	SHT	5 OF 5
REV.		BY	
DESCRIPTION	RELEASE FOR PRODUCTION	DATE	

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	10/12/16 WHT	A1, A2, HI, J1, K1, P1	GROUND
001A	16 VIO	N, NI	CLERK/TKR/ICC LAMPS
001B	14/16 BRN	A1, A2, N	CLERK/TKR/ICC LAMPS
002	14 GRN	AZ, RI	RH TURN/COMBO
003	14 YEL	AZ, O1	LH TURN/COMBO
004	14/16 PNK	A1, A2, F1	BACKUP SIGNAL
005A	16 VIO/WHT	N, NI	STOP ONLY
005B	14 RED	A2, N	STOP ONLY
006A	16 VIO/GRY	A2, H2	LOAD DOME LAMP (S)
006B	16 BLU	M, M1	DASH ILLUMINATION
009	12/16 RED	HI, KT, M	DOME BATTERY FEED
042A	16 GRN/ORN	DI, F2, HI	RH 150 TURN
042B	16 GRN/BLK	N, NI	RH 150 TURN
043A	16 GRY/ORN	N, NI	LH 150 TURN
043B	16 YEL/BLK	N, O1	LH 150 TURN
052A	16 GRY/BRN	N, NI	RH TURN COMBO
052B	14 GRN	N, RI	RH TURN COMBO
053A	16 GRY/BRN	N, NI	LH TURN COMBO
053B	14 YEL	N, O1	LH TURN COMBO
080	16 BLU/WHT	A2, HI	LOAD DM 3M SW
081	16 BLU/YEL	A2, HI	LOAD DM 3M SW
100	12 WHT/GRN	H2, P2	HVAC GROUND
101	12 GRN	E1, HI	ELECTRICAL POWER
103	14 YEL	F1, J1, SPLICE	WIPER POWER (ACCY)
106	16 BLK	A1, SPLICE	WIPER PARK SWITCH B+
107	16 GRN/WHT	A1, J1	WIPER HIGH
108	16 RED/WHT	A1, J1	WIPER MOTOR SWITCH
109	16 GRN	F1, J1	WASHER PUMP
111	16 PNK/BLK	A1, J1	AC DEMAND
114A	16 GRY/YEL	M, M1	LIGHTER/12V OUTLET
114B	16 PPL	M, P3	LOAD DOME RELAY COIL B+
116	14 RED/GRN	E1, HI	HVAC BLOWER RELAY COIL
118	16 GRY	G1, HI	LIGHTER/12V OUTLET GND
119	16 VIO/GRY	M1, M1	BATTERY FEED #1
200	14 WHT/BLK	H2, P2	BATTERY FEED #1
202A	12 WHT/RED	N, NI	AUX BATTERY POWER
202B	10 YEL	E1, N	AUX ACCESSORY POWER
204	14 RED/BLK	B2, D1, H1	SPARE BATTERY FEED
206	12 ORN/BLK	B2, D1, H1	SPARE BATTERY FEED
207A	14 BRN/RED	M, M1	BATTERY FEED #2
207B	12 RED/YEL	E1, M	ACCESSORY FEED #2
211	10 RED/BLK	D1, F1	HVAC POWER FEED (ACCY)
214	10 ORN/BLK	D1, F1	SWITCHED BATTERY LOADS
215	12 ORN/BLK	E1, F1	AUXILIARY LOADS GND
224	14 RED/GRN	A1, A2, H2	DASH FAN LOW
226	14 ORN/GRN	A1, A2, H2	DASH FAN HIGH
300	10/12 WHT/RED	A1, B2, H1, P1	CAB DOME LAMP
304	16 YEL/BLK	A1, H2	RH SPEAKER (-)
305	16 GRN/BLK	A1, H2	LH SPEAKER (-)
306	16 TAN	A2, H2	RH SPEAKER (+)
400	16 GRY/BLK	B1, H2	LH SPEAKER (-)
401	16 GRY/WHT	B1, H2	RH SPEAKER (+)
402	16 WHT/BLK	B1, H2	RADIO BATTERY POWER
403	16 WHT/GRN	B1, H2	RUN/ACCESSORY
404	14 YEL/RED	E1, H1	SPARE GROUND
405	16 ORN/BLK	A1, D1, H1	SPARE BATTERY POWER
416	18 GRY	M1, M1	LH TURN JUMPER
900	12 WHT/BLU	C1, P2	
904	12 RED/WHT	C1, E1	
JPR1	14 PNK	O2, O2	
JPR2	14 BLK	R2, R2	

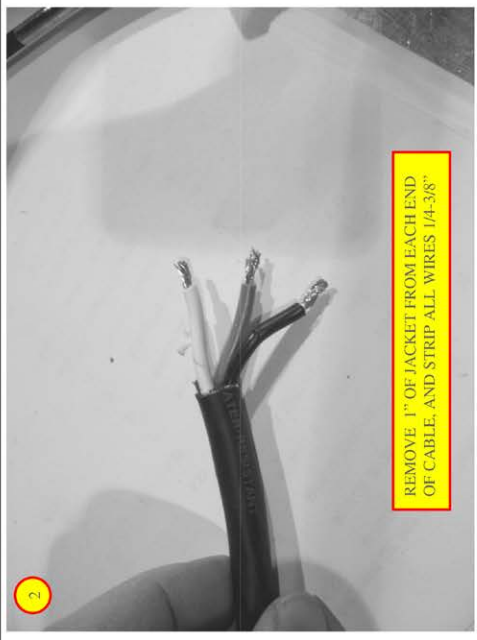
*SEE NOTES
OPTIONAL: CIRCUITS 400 & 401 MAY BE SUPPLIED AS STANDARD SPEAKER "ZIP CORD" PAIRS. CIRCUIT NUMBER AND CONNECTOR INDEXING MUST BE MAINTAINED AS SHOWN.
OPTIONAL: CIRCUITS 402 & 403 MAY BE SUPPLIED AS STANDARD SPEAKER "ZIP CORD" PAIRS. CIRCUIT NUMBER AND CONNECTOR INDEXING MUST BE MAINTAINED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

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**MORGAN
OLSON**

GENERAL STANDARDS UNLESS OTHERWISE NOTED:010
1. MATERIALS - U.S. SAE, UNLESS OTHERWISE NOTED
2. DIMENSIONS - U.S. DIMENSIONS UNLESS OTHERWISE NOTED
3. DIMENSIONS - U.S. DIMENSIONS UNLESS OTHERWISE NOTED
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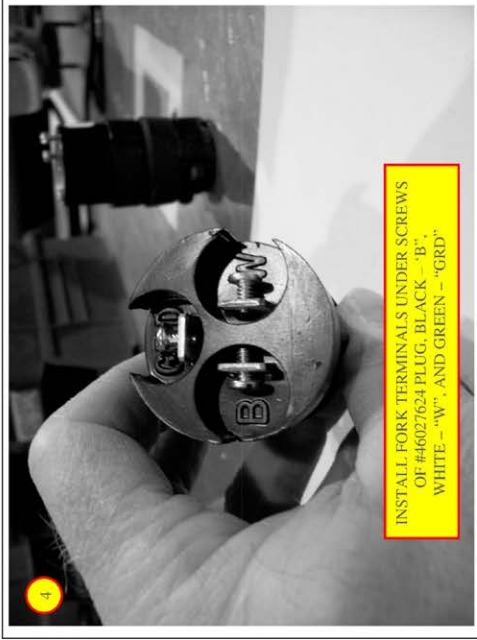
DRAWING NO. 12211201	REV SHT 1 of 2	DESCRIPTION RELEASE TO PRODUCTION	BY CHK DATE	REL NO DATE
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1 REMOVE 1" OF JACKET FROM EACH END OF CABLE, AND STRIP ALL WIRES 1/4-3/8"



2 CRIMP #46019303 LOCKING FORK TERMINALS TO EACH WIRE AT ONE END ONLY OF CABLE



3 INSTALL FORK TERMINALS UNDER SCREWS OF #46027624 PLUG; BLACK - "B", WHITE - "W", AND GREEN - "GRD"



4 INSTALL #46027623 BOOT ONTO CABLE AS SHOWN

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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED:
 1. TOLERANCE: X ± .060, XX ± .030, XXX ± .010
 ANGLES: X ± 5 DEGREES
 2. BREAK ALL EXPOSED SHARP EDGES AND DEBURR
 3. FOR ALL PARTS ALL INSIDE CORNERS MUST BE WITH .188" R
 4. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION


DRAWN: JKP
CHECKED: -
RELEASE NO: 39448
DATE: 16OCT12
DATE: 16OCT12

DO NOT SCALE

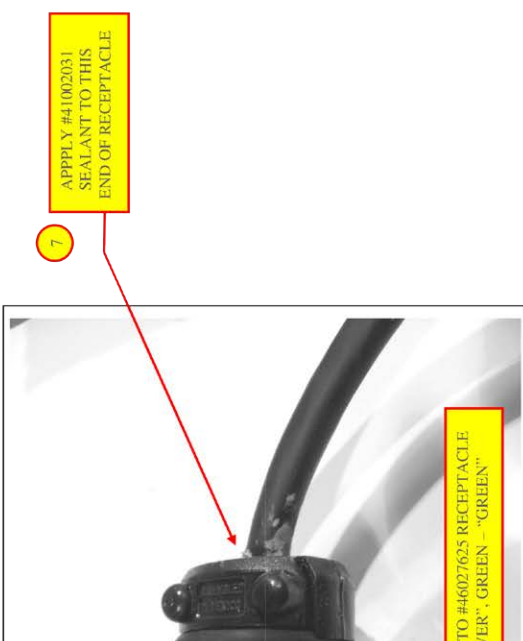
NAME: HARN EXTN CORD 25 FEET
120V S/EEOOW WP W/BOOT&PLUG

SHT: 1 of 2
DRAWING NO: 12211201
SCALE: NONE
REV:

DRAWING NO. 12211201	REV SHT 2 of 2	DESCRIPTION RELEASE TO PRODUCTION	BY CHK DATE	REL NO DATE
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5 APPLY #41002031 SEALANT TO THIS END OF RECEPTACLE



6 INSTALL OTHER END OF CABLE INTO #46027625 RECEPTACLE
BLACK - "GOLD", WHITE - "SILVER", GREEN - "GREEN"

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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED:
 1. TOLERANCE: X ± .060, XX ± .030, XXX ± .010
 ANGLES: X ± 5 DEGREES
 2. BREAK ALL EXPOSED SHARP EDGES AND DEBURR
 3. FOR ALL PARTS ALL INSIDE CORNERS MUST BE WITH .188" R
 4. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION

DRAWN: JKP
CHECKED: -
RELEASE NO: 39448
DATE: 16OCT12
DATE: 16OCT12

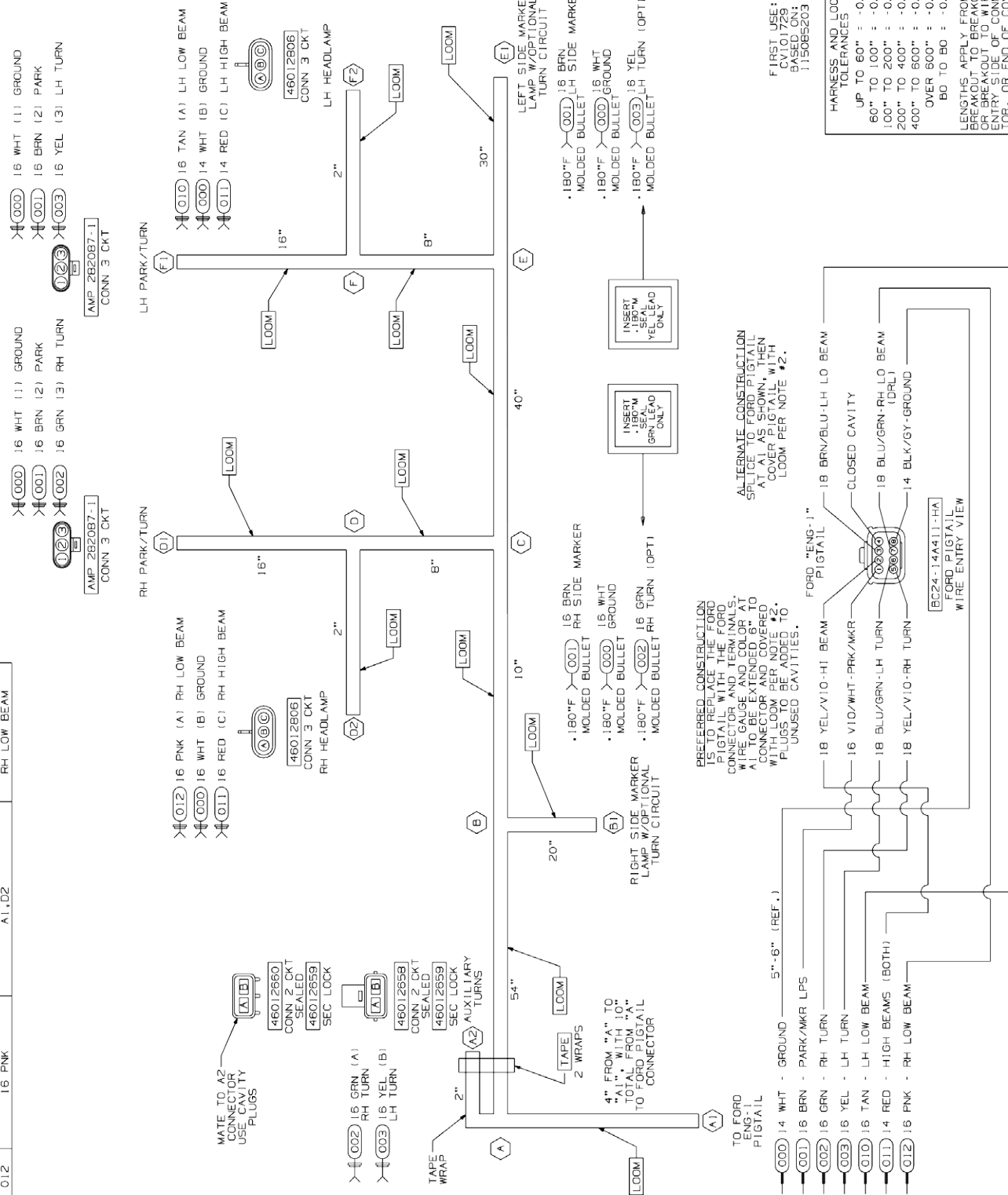
DO NOT SCALE

NAME: HARN EXTN CORD 25 FEET
120V S/EEOOW WP W/BOOT&PLUG

SHT: 2 of 2
DRAWING NO: 12211201
SCALE: NONE
REV:

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

DRAWING NO.	REV	SHT
135085204		1 OF 1
DESCRIPTION		
RELEASE FOR PRODUCTION		
BY	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 MOLDS OR SPECIALTY MOLDS. THIS IS 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 SHINK TUBING.
4. TAPE [1111096]: 6" AT BREAKOUTS, 2" AT INTER-RUPTED 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, VENDOR TO USE THE SMALLEST POSSIBLE SIZE UNLESS SPECIFIED ON THE DRAWING.
1. GXL WIRE.

NOTES:

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MORGAN OLSON

SEVERAL STANDARDS VALUES CANNOT BE NOTED:
1. TOLERANCE: ±0.0005 INCH
2. BREAK: ALL EXPOSED SURFACES AND DEBRIS TO BE REMOVED
3. FINISH: ALL SURFACES TO BE FINISHED TO SPECIFICATION
4. DIMENSIONS TO CENTER UNLESS OTHERWISE NOTED

FIRST USE:
CV101729
135085203

HARNESS AND LOOM TOLERANCES:
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+8"
200" TO 400" : -0/+16"
400" TO 600" : -0/+32"
600" TO 800" : -0/+48"
800" TO 1000" : -0/+64"

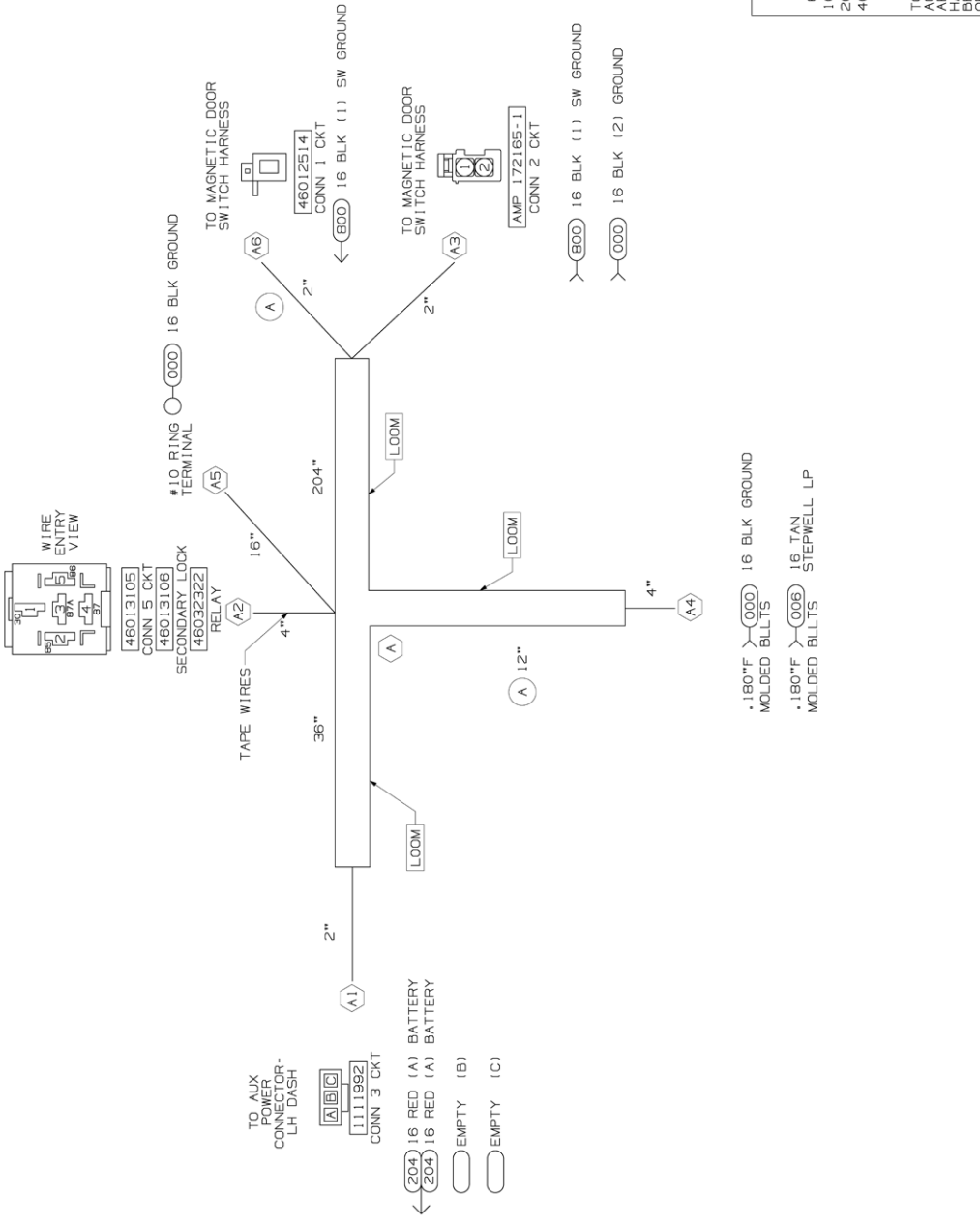
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT, OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR, OR END OF COVER.

REV	DESCRIPTION	DATE
A	RELEASE TO PRODUCTION	
B	17" WAS 22"	4/27/15
C	BREAKOUT TAB ADDED	7/27/15

DATE: 08MAY13
DRAWN: 40B39
DATE: 2013
SCALE: NONE
REV: 135085204

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 BLK	A2,A3	SW GROUND
204	16 RED	A1,A2	BATTERY
006	16 TAN	A2,A4	STEPWELL LP
000	16 BLK	A3,A4,A5	GROUND

- > (204) 16 RED (1) BATTERY
- > (204) 16 RED (2) BATTERY
- > () EMPTY (3) NOT USED
- > (006) 16 TAN (4) STEPWELL LP
- > (000) 16 BLK (5) SW GROUND



- > (180) 16 RED (A) BATTERY
- > (204) 16 RED (A) BATTERY
- > () EMPTY (B)
- > () EMPTY (C)
- > (A4) 16 BLK GROUND
- > (A) 16 TAN STEPWELL LP
- > (A) 12"
- > (A) 16 BLK (1) SW GROUND
- > (A) 16 BLK (2) GROUND
- > (A) 16 BLK (1) SW GROUND
- > (A) 16 BLK (2) GROUND

BASED ON:
127392201

HARNESS AND LOOM TOLERANCES:
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+8"
200" TO 400" : -0/+16"
400" TO 600" : -0/+32"
600" TO 800" : -0/+48"
800" TO 1000" : -0/+64"

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

DRAWING NO.	REV	SHT
137392203	A	1 OF 1
DESCRIPTION		
RELEASE TO PRODUCTION		
BY	DATE	

DATE: 08MAY13
DRAWN: 40B39
DATE: 2013
SCALE: NONE
REV: 137392203

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SEVERAL STANDARDS VALUES CANNOT BE NOTED:
1. TOLERANCE: ±0.0005 INCH
2. BREAK: ALL EXPOSED SURFACES AND DEBRIS TO BE REMOVED
3. FINISH: ALL SURFACES TO BE FINISHED TO SPECIFICATION
4. DIMENSIONS TO CENTER UNLESS OTHERWISE NOTED

FIRST USE:
CV101729
135085203

HARNESS AND LOOM TOLERANCES:
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+8"
200" TO 400" : -0/+16"
400" TO 600" : -0/+32"
600" TO 800" : -0/+48"
800" TO 1000" : -0/+64"

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

DRAWING NO.		REV	SHT
1400BB200			1 of 1
REV	DESCRIPTION	BY	DATE
	RELEASE TO PRODUCTION		

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	A1, B1, B2	GROUND
001	16 BLK	A2, B3, B4	POWER

- 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 HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ACCEPTABLE FOR FABRICATION IF NECESSARY.
- TAPE (1111096): 6" AT ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED:
 1. DIMENSIONS: A. 1/16" MIN. UNLESS OTHERWISE SPECIFIED.
 2. DIMENSIONS: B. 1/32" MIN. UNLESS OTHERWISE SPECIFIED.
 3. DIMENSIONS: C. 1/64" MIN. UNLESS OTHERWISE SPECIFIED.
 4. DIMENSIONS: D. 1/128" MIN. UNLESS OTHERWISE SPECIFIED.
 5. DIMENSIONS: E. 1/256" MIN. UNLESS OTHERWISE SPECIFIED.
 6. DIMENSIONS: F. 1/512" MIN. UNLESS OTHERWISE SPECIFIED.
 7. DIMENSIONS: G. 1/1024" MIN. UNLESS OTHERWISE SPECIFIED.
 8. DIMENSIONS: H. 1/2048" MIN. UNLESS OTHERWISE SPECIFIED.
 9. DIMENSIONS: I. 1/4096" MIN. UNLESS OTHERWISE SPECIFIED.
 10. DIMENSIONS: J. 1/8192" MIN. UNLESS OTHERWISE SPECIFIED.
 11. DIMENSIONS: K. 1/16384" MIN. UNLESS OTHERWISE SPECIFIED.
 12. DIMENSIONS: L. 1/26768" MIN. UNLESS OTHERWISE SPECIFIED.
 13. DIMENSIONS: M. 1/53536" MIN. UNLESS OTHERWISE SPECIFIED.
 14. DIMENSIONS: N. 1/107072" MIN. UNLESS OTHERWISE SPECIFIED.
 15. DIMENSIONS: O. 1/214144" MIN. UNLESS OTHERWISE SPECIFIED.
 16. DIMENSIONS: P. 1/428288" MIN. UNLESS OTHERWISE SPECIFIED.
 17. DIMENSIONS: Q. 1/856576" MIN. UNLESS OTHERWISE SPECIFIED.
 18. DIMENSIONS: R. 1/1713152" MIN. UNLESS OTHERWISE SPECIFIED.
 19. DIMENSIONS: S. 1/3426304" MIN. UNLESS OTHERWISE SPECIFIED.
 20. DIMENSIONS: T. 1/6852608" MIN. UNLESS OTHERWISE SPECIFIED.
 21. DIMENSIONS: U. 1/13705216" MIN. UNLESS OTHERWISE SPECIFIED.
 22. DIMENSIONS: V. 1/27410432" MIN. UNLESS OTHERWISE SPECIFIED.
 23. DIMENSIONS: W. 1/54820864" MIN. UNLESS OTHERWISE SPECIFIED.
 24. DIMENSIONS: X. 1/109641728" MIN. UNLESS OTHERWISE SPECIFIED.
 25. DIMENSIONS: Y. 1/219283456" MIN. UNLESS OTHERWISE SPECIFIED.
 26. DIMENSIONS: Z. 1/438566912" MIN. UNLESS OTHERWISE SPECIFIED.

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 80 : -0/+2"
 TOLERANCE IS NOT ACCUMULATIVE
 APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

FIRST USE:
CURBSIDE MID-BODY MARKER

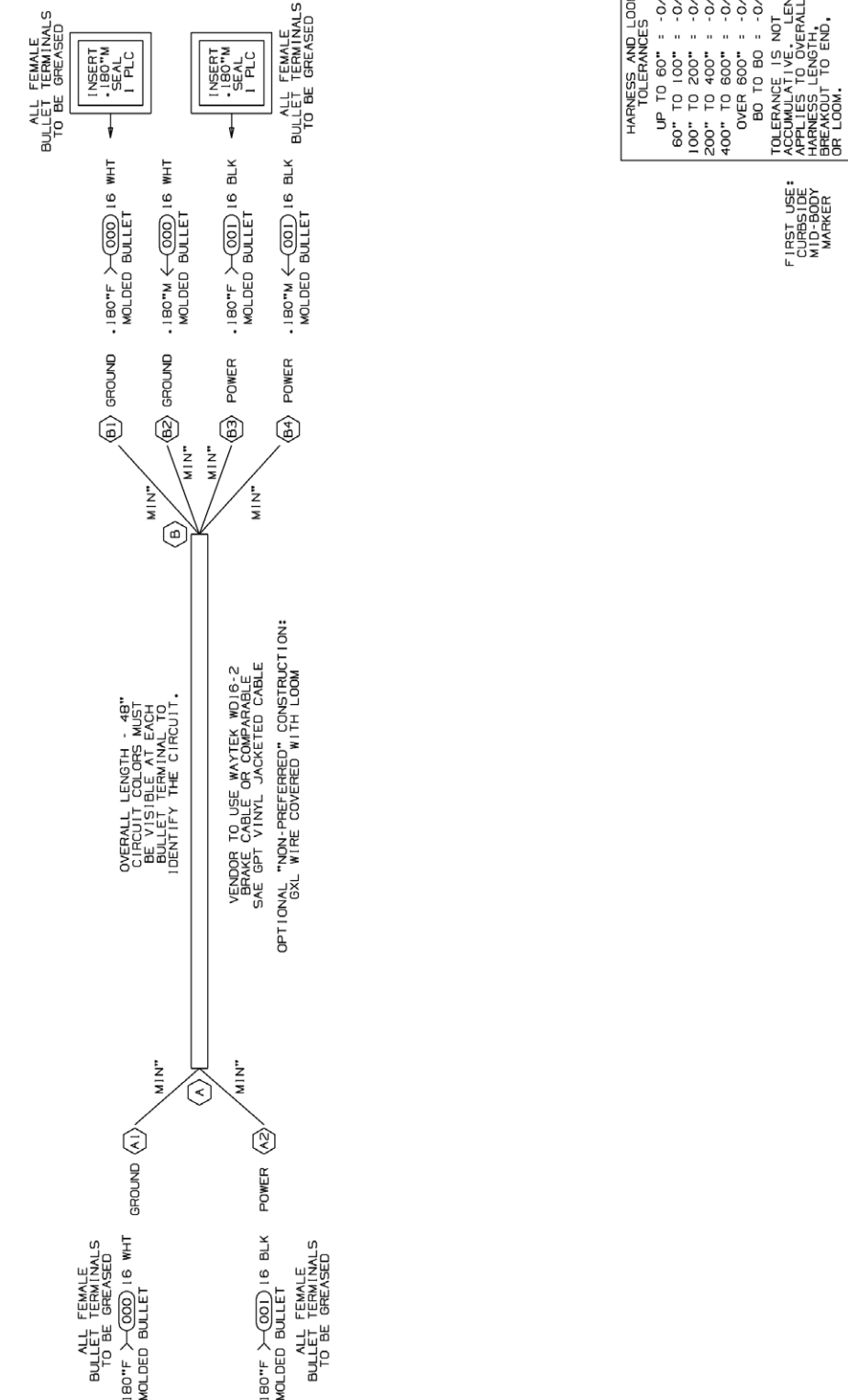
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SHT: 42/40
17DEC13

DO NOT SCALE

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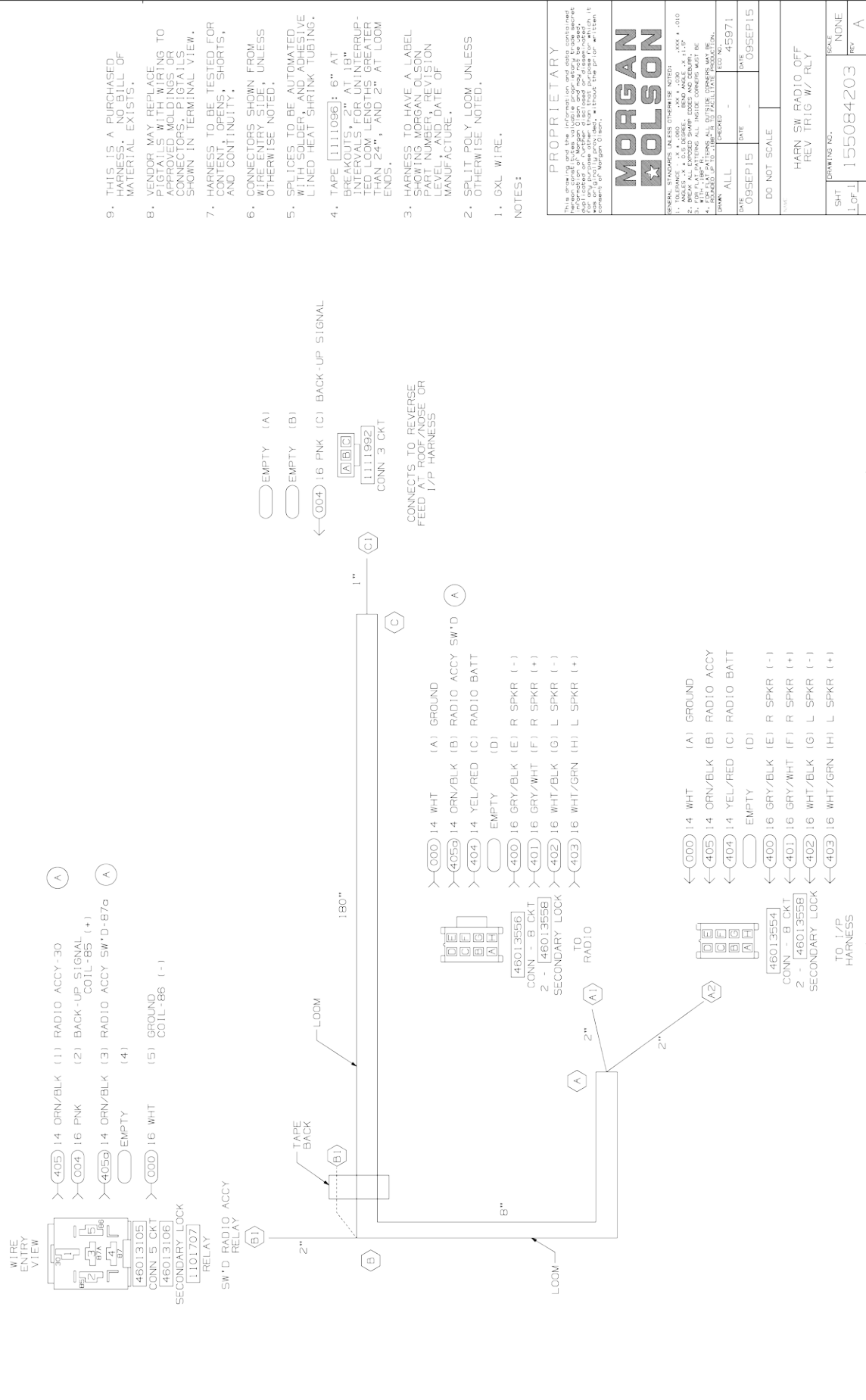
SCALE: NONE

SHT: 1 of 1
DRAWING NO.: 1400BB200
REV:



DRAWING NO.		REV	SHT
155084203		A	1 of 1
REV	DESCRIPTION	BY	DATE
	RELEASE TO PRODUCTION		

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	14/16 WHT	A2, B1	GROUND
405a	14 ORN/BLK	A1, B1	RADIO ACCY SW'D
004	16 PNK	B1, C1	BACK-UP SIGNAL
400	16 GRN/BLK	A1, A2	R SPKR (-)
401	16 GRN/WHI	A1, A2	R SPKR (+)
402	16 WHT/BLK	A1, A2	L SPKR (-)
403	16 WHT/GRN	A1, A2	L SPKR (+)
404	14 YEL/RED	A1, A2	RADIO BATT
405	14 ORN/BLK	A1, A2	RADIO ACCY



- 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 SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. HEAT SHRINK BUTT SPLICES ACCEPTABLE FOR FABRICATION IF NECESSARY.
- TAPE (1111096): 6" AT 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.

PROPRIETARY
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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED:
 1. DIMENSIONS: A. 1/16" MIN. UNLESS OTHERWISE SPECIFIED.
 2. DIMENSIONS: B. 1/32" MIN. UNLESS OTHERWISE SPECIFIED.
 3. DIMENSIONS: C. 1/64" MIN. UNLESS OTHERWISE SPECIFIED.
 4. DIMENSIONS: D. 1/128" MIN. UNLESS OTHERWISE SPECIFIED.
 5. DIMENSIONS: E. 1/256" MIN. UNLESS OTHERWISE SPECIFIED.
 6. DIMENSIONS: F. 1/512" MIN. UNLESS OTHERWISE SPECIFIED.
 7. DIMENSIONS: G. 1/1024" MIN. UNLESS OTHERWISE SPECIFIED.
 8. DIMENSIONS: H. 1/2048" MIN. UNLESS OTHERWISE SPECIFIED.
 9. DIMENSIONS: I. 1/4096" MIN. UNLESS OTHERWISE SPECIFIED.
 10. DIMENSIONS: J. 1/8192" MIN. UNLESS OTHERWISE SPECIFIED.
 11. DIMENSIONS: K. 1/16384" MIN. UNLESS OTHERWISE SPECIFIED.
 12. DIMENSIONS: L. 1/32768" MIN. UNLESS OTHERWISE SPECIFIED.
 13. DIMENSIONS: M. 1/65536" MIN. UNLESS OTHERWISE SPECIFIED.
 14. DIMENSIONS: N. 1/131072" MIN. UNLESS OTHERWISE SPECIFIED.
 15. DIMENSIONS: O. 1/262144" MIN. UNLESS OTHERWISE SPECIFIED.
 16. DIMENSIONS: P. 1/524288" MIN. UNLESS OTHERWISE SPECIFIED.
 17. DIMENSIONS: Q. 1/1048576" MIN. UNLESS OTHERWISE SPECIFIED.
 18. DIMENSIONS: R. 1/2097152" MIN. UNLESS OTHERWISE SPECIFIED.
 19. DIMENSIONS: S. 1/4194304" MIN. UNLESS OTHERWISE SPECIFIED.
 20. DIMENSIONS: T. 1/8388608" MIN. UNLESS OTHERWISE SPECIFIED.
 21. DIMENSIONS: U. 1/16777216" MIN. UNLESS OTHERWISE SPECIFIED.
 22. DIMENSIONS: V. 1/33554432" MIN. UNLESS OTHERWISE SPECIFIED.
 23. DIMENSIONS: W. 1/67108864" MIN. UNLESS OTHERWISE SPECIFIED.
 24. DIMENSIONS: X. 1/134217728" MIN. UNLESS OTHERWISE SPECIFIED.
 25. DIMENSIONS: Y. 1/268435456" MIN. UNLESS OTHERWISE SPECIFIED.
 26. DIMENSIONS: Z. 1/536870912" MIN. UNLESS OTHERWISE SPECIFIED.

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 80 : -0/+2"
 TOLERANCE IS NOT ACCUMULATIVE
 APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

FIRST USE:
CURBSIDE MID-BODY MARKER

DATE: 17DEC13
SHT: 42/40
17DEC13

DO NOT SCALE

NAME: HARNESS JUMPER 48" 2W "Y" (180F TO 180F/180M EACH CKT)

SCALE: NONE

SHT: 1 of 1
DRAWING NO.: 155084203
REV: A

DRAWING NO. 157094203	REV. REL	SHT 1 of 1	DESCRIPTION RELEASE TO PRODUCTION	BY CHK	REL. NO. DATE
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1. ADD TERMINAL 46018504 (QTY3) TO END OF RED WIRE, BLACK WIRE, AND BROWN WIRE.

2. PUSH TERMINATED WIRES INTO CONNECTOR 1111992 AS SHOWN IN SCHEMATIC BELOW

3. ADD LOOM 46020201 OVER WIRES AND UNCONNECTED WIRES, TAPE 1111096 ENDS

Black 4 pin male for Camera 1 / Camera 2 / Camera 3
 Single red wire for positive ignition power supply of DC / 10-32V
 Single black wire for GND
 Single brown wire to positive power wire of back-up light
 Single white wire to positive power wire of left turn light
 Single blue wire to positive power wire of right turn light

NOTICE
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DATE 07/2012 **SHEET** 1 OF 1

DWG NO. 01.300.C **DWG NAME** CBL.300.C **APPROVED** MEV **ZONE DEFENSE, LLC**

GENERAL STANDARDS UNLESS OTHERWISE NOTED:

- TOLERANCE: X ± .060 XX ± .030 XXX ± .010
- ANGLES: X ± 5 DEGREES
- BREAK ALL EXPOSED SHARP EDGES AND DEBURK FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R
- FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

DRAWN ALL **CHECKED** - **RELEASE NO.** 46230

DATE 22OCT15 **DATE** 22OCT15

DO NOT SCALE.

NAME CABLE A MONITOR POWER
ZONE DEFENSE #CBL.354.300

SHT 1 of 1 **DRAWING NO.** 157094203 **SCALE** NONE **REV** REL

PROPRIETARY
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GENERAL STANDARDS UNLESS OTHERWISE NOTED:

- TOLERANCE: X ± .060 XX ± .030 XXX ± .010
- ANGLES: X ± 5 DEGREES
- BREAK ALL EXPOSED SHARP EDGES AND DEBURK FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R
- FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

DRAWN ALL **CHECKED** - **RELEASE NO.** 46230

DATE 22OCT15 **DATE** 22OCT15

DO NOT SCALE.

NAME CABLE A MONITOR POWER
ZONE DEFENSE #CBL.354.300

SHT 1 of 1 **DRAWING NO.** 157094203 **SCALE** NONE **REV** REL

DRAWING NO. 157388200	REV. 1 of 1	SHT 1 of 1	DESCRIPTION RELEASE TO PRODUCTION
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- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. DIMENSIONS 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 TO BE USED FOR ALL BOLT OR 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 JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

NOTES:

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GENERAL STANDARDS UNLESS OTHERWISE NOTED:

- TOLERANCE: X ± .060 XX ± .030 XXX ± .010
- ANGLES: X ± 5 DEGREES
- BREAK ALL EXPOSED SHARP EDGES AND DEBURK FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R
- FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

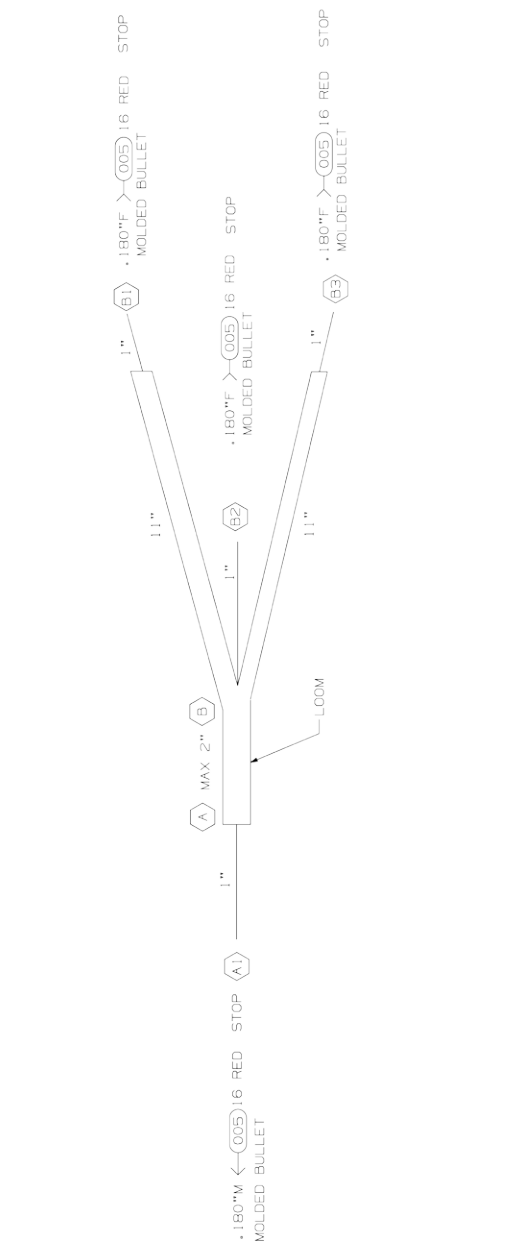
DRAWN ALL **CHECKED** - **RELEASE NO.** 46230

DATE 21OCT15 **DATE** 21OCT15

DO NOT SCALE.

NAME HARNESS JUMPER SPCL CHMSL
ICC

SHT 1 of 1 **DRAWING NO.** 157388200 **SCALE** NONE **REV** NONE



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 APPLIES TO OVERALL HARNESS LENGTH, BREAKOUT TO END, OR LOOM.

DESIGN REVISIONS HISTORY

REV	DATE	DESCRIPTION
A	10/14/11	ORIGINAL

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

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 (+)

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MORGAN OLSON

GENERAL STANDARDS UNLESS OTHERWISE NOTED:
 1. DIMENSIONS ARE IN INCHES.
 2. DIMENSIONS IN PARENTHESSES ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.
 3. DIMENSIONS IN SQUARE BRACKETS ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.
 4. DIMENSIONS IN SQUARE BRACKETS ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.
 5. DIMENSIONS IN SQUARE BRACKETS ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.

DATE	01DEC11
DATE	01DEC11
NAME	DO NOT SCALE
NAME	HARN SPKR ASAA# MCSPKHRN
NAME	USE WITH 46025590
SHT	1 of 1
REV	46025591
REV	NONE
REV	REP

MORGAN OLSON

2000 Maple Drive
 Elkhart, IN 46514
 www.morganolson.com

3140009

DESCRIPTION: HARNESS, 4 PIN PACKARD TO FASTON SPEAKERS

SCALE	1/4"
SHEET	1 OF 1
DATE	10/14/11
DRAWN BY	J. HAMILTON

REV	DESCRIPTION	DATE
1	RELEASE TO PRODUCTION	

ASElectronics
 IN WIRE ELECTRICAL BATTERY WIRE

2000 Maple Drive
 Elkhart, IN 46514
 www.aselectronics.com

REV	DESCRIPTION	DATE
1	RELEASE TO PRODUCTION	

REV	DESCRIPTION
1	RELEASE TO PRODUCTION

NOTES:

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- CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK BUTT SPLICES ARE ACCEPTABLE FOR GO FABRICATION IF NECESSARY.
- TAPE [111109B]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING GELMAN OLSON LEVEL NUMBER, REVISION NUMBER AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

PROPRIETARY
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MORGAN OLSON

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 2. DIMENSIONS IN PARENTHESSES ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.
 3. DIMENSIONS IN SQUARE BRACKETS ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.
 4. DIMENSIONS IN SQUARE BRACKETS ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.
 5. DIMENSIONS IN SQUARE BRACKETS ARE DIMENSIONS OF EQUIVALENT METRIC SYSTEMS.

DATE	01DEC11
DATE	01DEC11
NAME	DO NOT SCALE
NAME	JUMPER-HARN TEE-GENERIC
SHT	1 of 1
REV	46025591
REV	NONE
REV	REP

MORGAN OLSON

2000 Maple Drive
 Elkhart, IN 46514
 www.morganolson.com

