

# *Purolator*

We deliver Canada

2017 Parts Catalog



Ford E-450 Chassis

2017 Morgan Olson Body



1.800.233.4823  
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This parts guide contains illustrations and part numbers for Purolator Package Delivery Vehicles and applies to bill of material # JV001727 produced in 2017 on the FORD E-450 Chassis.

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.

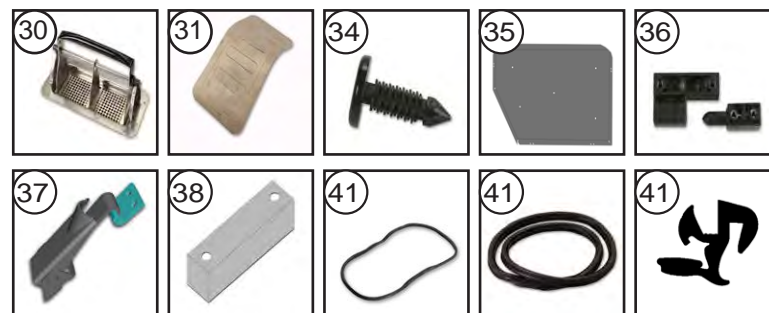
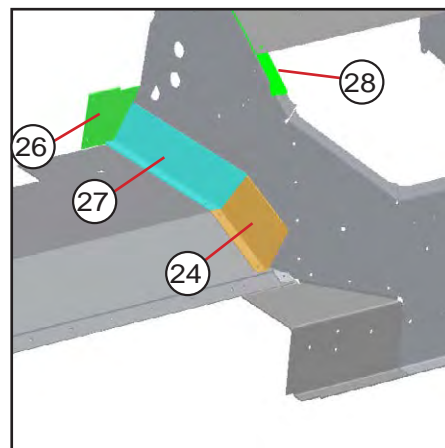
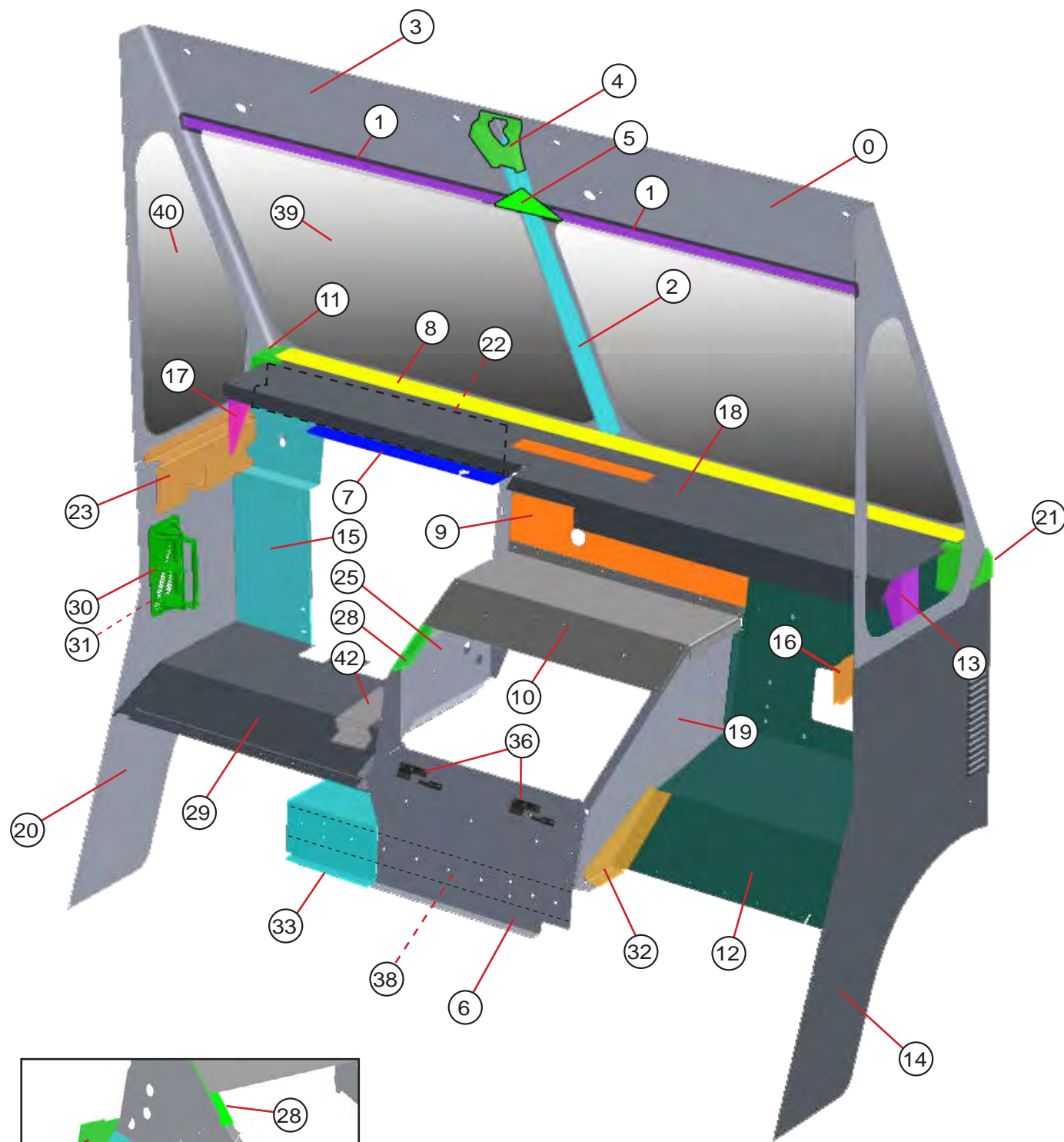
Parts are also available from our parts website at [www.morganolsonparts.com](http://www.morganolsonparts.com).

FOR WARRANTY INFORMATION CALL 1-800-262-3437

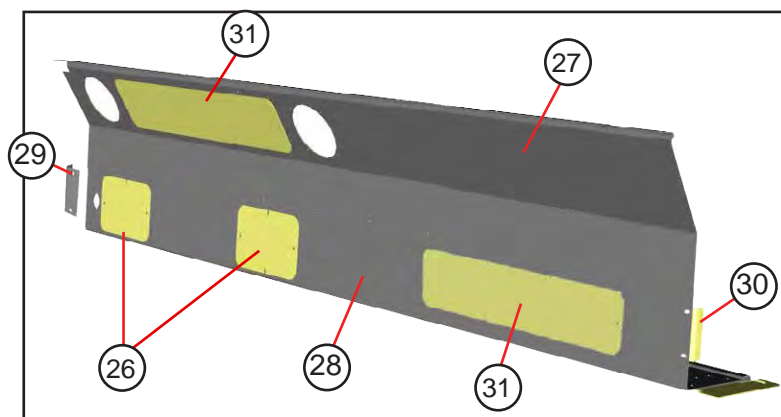
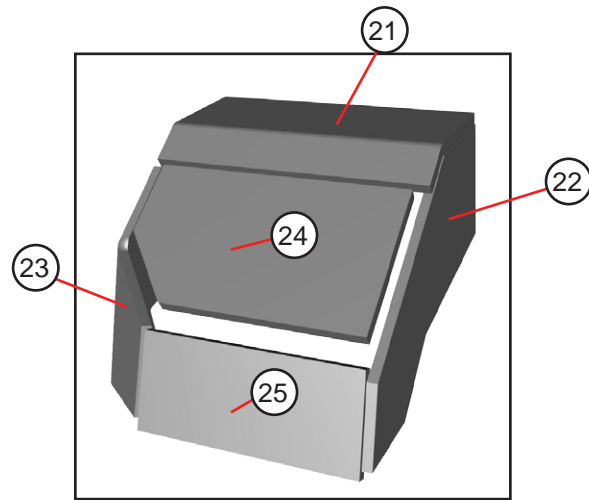
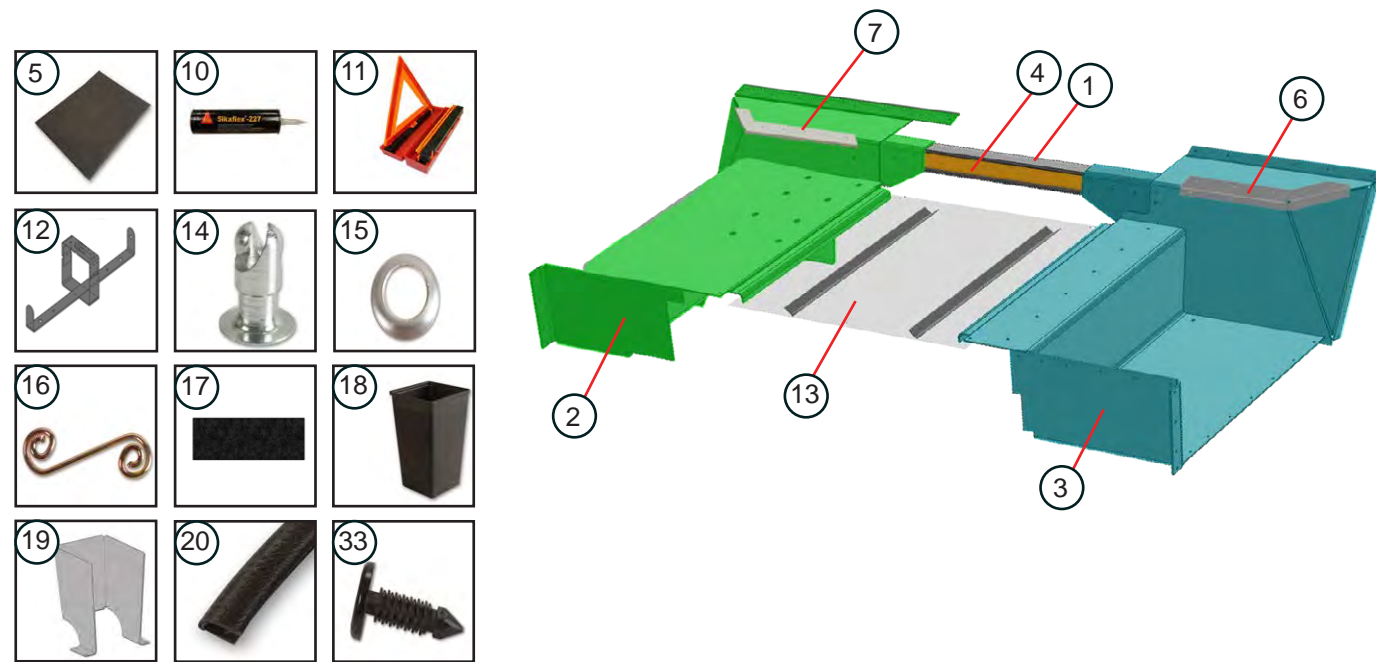
ANY QUESTIONS OR CONCERNS SHOULD BE DIRECTED TO YOUR SERVICE PARTS REPRESENTATIVE AT 1-800-233-4823

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	088055402	FRAME W/S AL .102X49.72X70.07 RH	1	EA
1	077055404	STIFFENER W/S AL 450540X44.25	2	EA
2	077055400	POST W/S CENTER AL 450540X40	1	EA
3	088055401	FRAME W/S AL .102X49.72X69.77 LH	1	EA
4	077055402	GUSSET FRAME W/S AL .125X6.49X7.27	1	EA
5	998555329	GUSSET FRAME W/S AL .125X4.6X9.19	1	EA
6	155005411	ENGINE BOX SADDLE AL .102X15.61X23.8	1	EA
7	095005482	DASH UPPER AL .102X4.6X23.74 LH	1	EA
8	083023402	RAIL W/S 93W AL 851100X89	1	EA
9	165005410	DASH WALL CENTER AL .102X14.85X31.69	1	EA
10	095005437	ENGINE BOX TOP AL .102X15.68X30.51	1	EA
11	8502000	CORNER AL CAST W/S LH	1	EA
12	175005402	TOE BOARD AL .125X32.88X47.75 RH	1	EA
13	083005419	SUPPORT RAIL W/S AL.102X5.74X8.27 RH	1	EA
14	155005408	CAB SKIRT AL .07X40.6x45.91 RH	1	EA
15	095005435	DASH WALL OUTER AL .102X13.64X28.36	1	EA
16	157005402	STIFFENER W/S AL .125X12.07X17.69 RH	1	EA
17	083005418	SUPPORT RAIL W/S AL .102X5.74X8.27 LH	1	EA
18	125027406	SHELF DASH AL .102X13.74X89	1	EA
19	155005418	ENGINE BOX PANEL AL .125X21.52X29.91 RH	1	EA
20	095005444	CAB SKIRT AL .07X40.60X45.91 LH	1	EA
21	8502001	CORNER AL CAST W/S RH	1	EA
22	095005431	DASH WALL UPPER AL LH (BETWEEN ITEMS 7 AND 18)	1	EA
23	083005521	STIFFENER W/S AL .125X10.93X17.81 LH	1	EA
24	155005419	ENGINE BOX ADAPTOR AL .102X4.72X9.82	1	EA
25	155005412	ENGINE BOX PANEL AL .102X19.94X32.53 LH	1	EA
26	115005452	CLOSURE CAB AL .07X4.67X6.6	1	EA
27	115005450	ADAPTOR ENGINE BOX AL .102X4.36X13.39	1	EA
28	155005415	ENGINE BOX UPPER PANEL AL .102X2.59X11.82	1	EA
29	115005453	TOE BOARD AL .125X21.01X36.54 LH	1	EA
30	47008545	VENT AL 2WAY HINGELESS (GUARD - 003711425)	1	EA
31	47008548	GASKET FOR VENT #47008545	1	EA
32	077050406	GUSSET TOEBOARD AL .125X5.33X14.88 RH	1	EA
33	155005416	ENGINE BOX SADDLE FILLER AL .102X12.8X13.78	1	EA
34	47006630	CLIP PLASTIC ROUND HEAD 1.32-1.34	10	EA
35	145028401	LID ENGINE BOX AL .102X18.35X32.44	1	EA
36	47007859	HINGE OFFSET	2	EA
37	47000932	LATCH ENGINE BOX ADJUSTABLE DRAW	2	EA
38	117028400	SHIM ENGINE BOX	1	EA
39	96756400	GLASS WINDSHIELD	2	EA
40	083056401	GLASS SIDE TRIANGLE	2	EA
41	44004303	WEATHER STRIP MOULDING FOR WINDSHIELD X147.5	2	EA
41	44004305	WEATHER STRIP MOULDING FOR SIDE GLASS X85.5	2	EA
42	155005420	HEEL REST ALD .125X11.17X11.83	1	EA



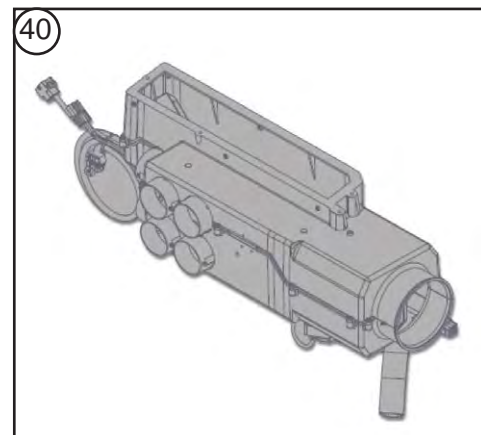
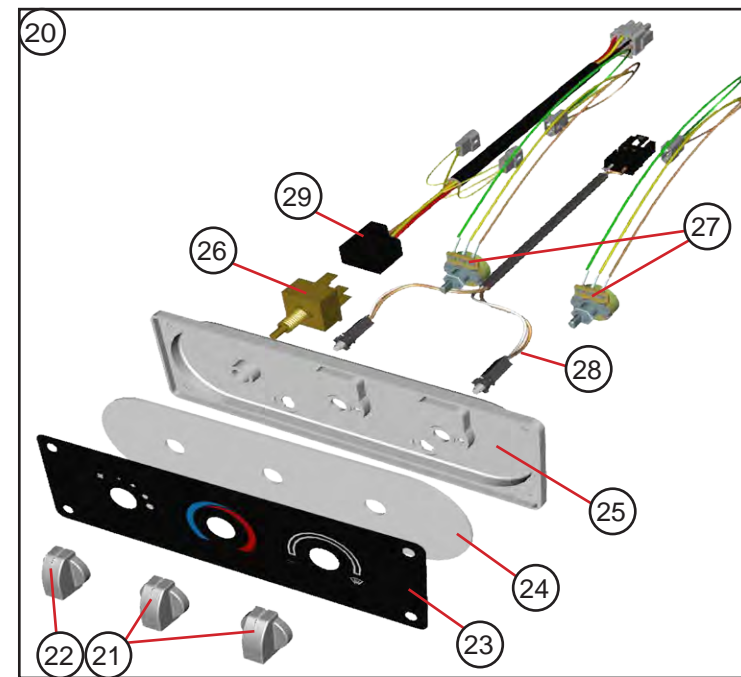
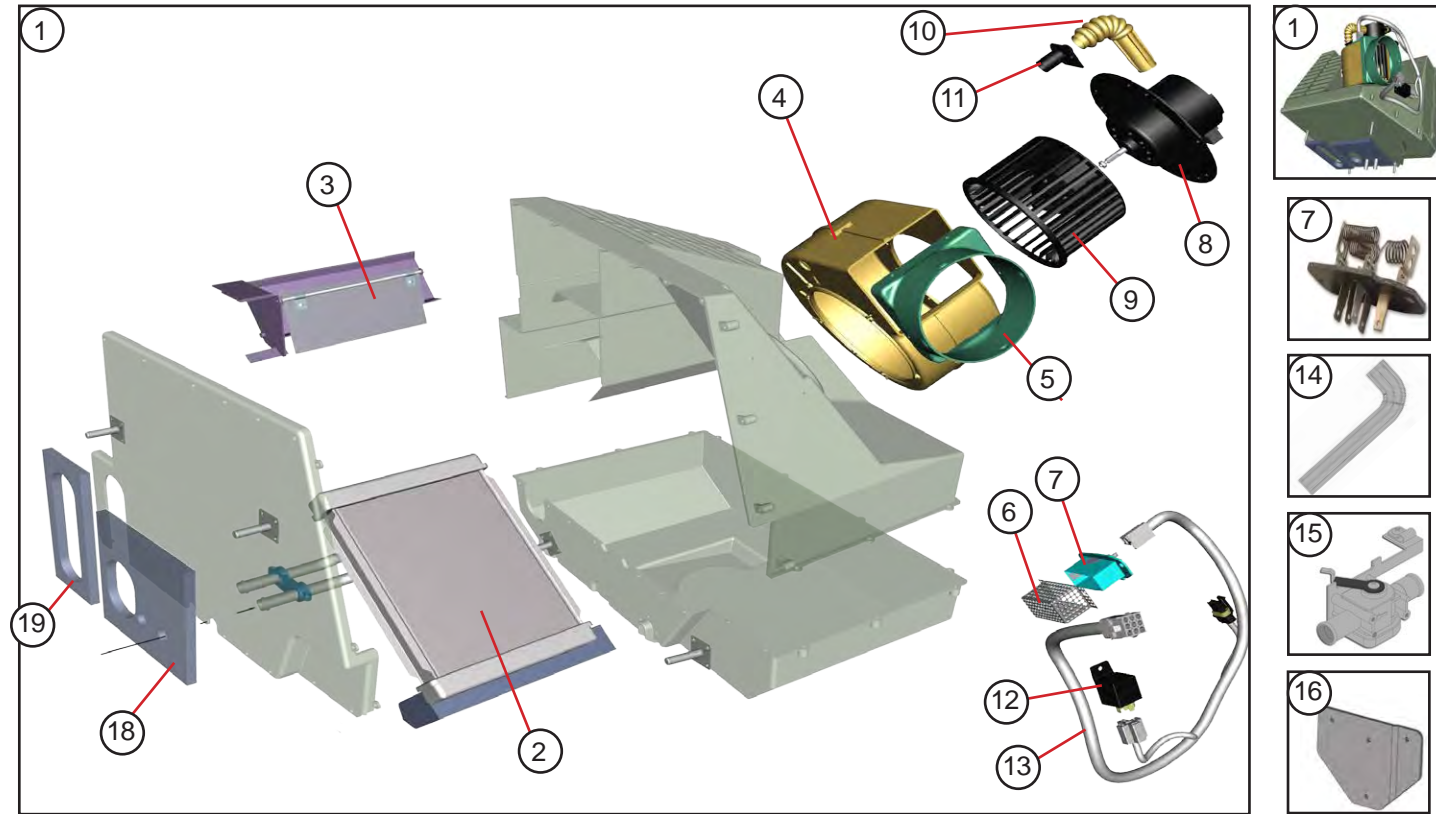
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	077240400	CROSSMEMBER CENTER AL 456106X41	1	EA
2	105024207	STEP ASSEMBLY WELDMENT ROADSIDE 93W F59	1	EA
3	095024242	STEP ASSEMBLY WELDMENT CURBSIDE 93W F59	1	EA
4	077050402	SHIM AL .25X1.62X20.8	1	EA
5	1107235	PAD RUBBER RIBBED .125 X 30'	6	FT
6	095019437	TRIM TOEBOARD ALD .08X7.54X23.87 RH	1	EA
7	083019403	TRIM TOEBOARD ALD .08X2.66X31.58 LH	1	EA
10	41002103	SEALANT/ADHESIVE	2	EA
11	47009547	SAFETY KIT 3 TRIANGLES IN STORAGE 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	45200345	PLATE STEP FBG ANTI SLIP .125X13.84X25.13	1	EA
17	45400582	ANTI SLIP RH STEP	1	EA
18	45200051	TRASH RECEPTICLE	1	EA
19	05M078011	SUPPORT RECEPTICLE AL .125X19.89X24.7	1	EA
20	1129005	TRIM QUICK EDGE	7	FT

**ENGINE BOX INSULATION**

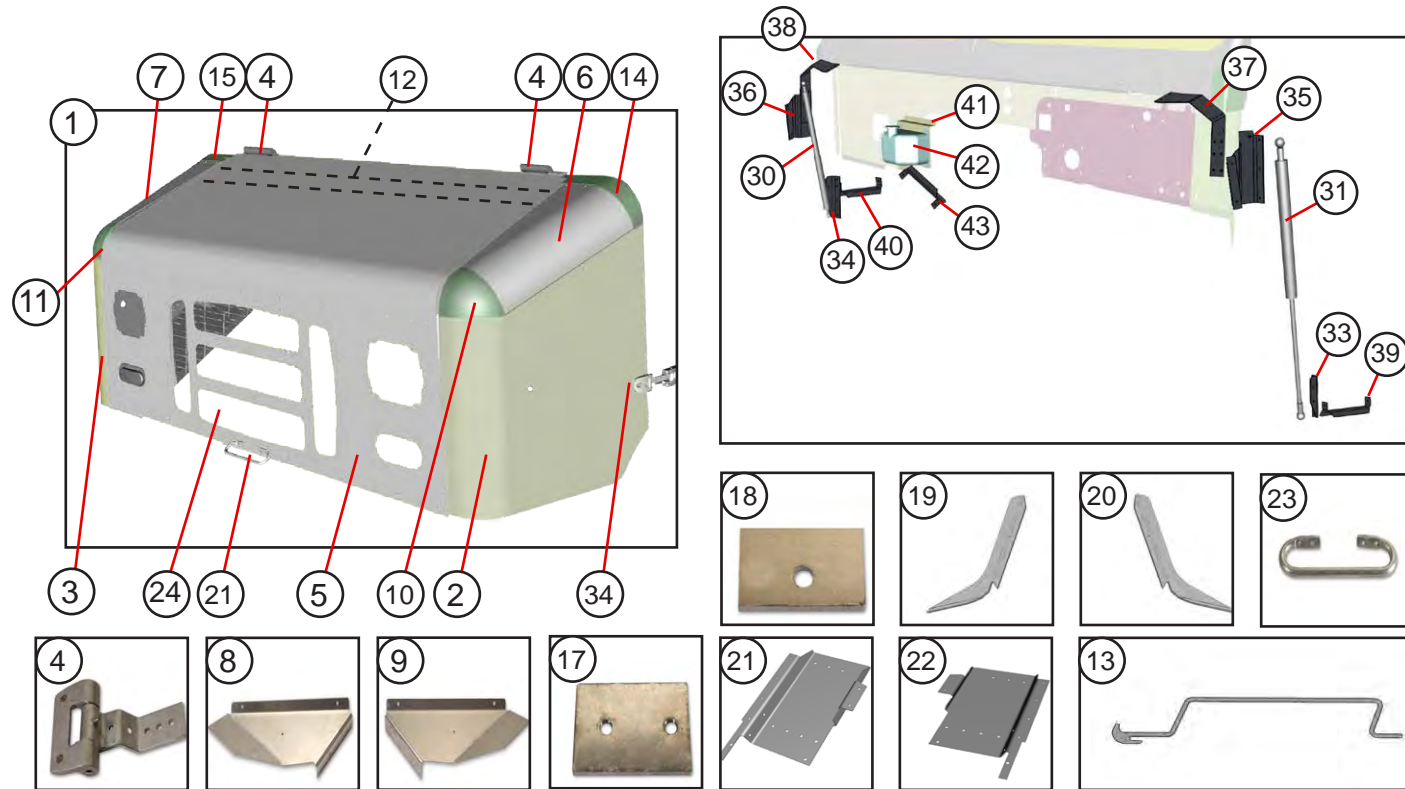
21	095005455	INSULATION E/BX PSA 1X12.18X28.34	1	EA
22	093005405	INSULATION E/BX PSA 1X17.56X27.46 RH	1	EA
23	105005456	INSULATION E/BX42002056X17.43X32.37	1	EA
24	105005457	INSULATION E/BX 42002056X8.09X22.61	1	EA
25	105005458	INSULATION E/BX SADDLE 42002056X7X21.5	1	EA
33	47006630	CLIP PLASTIC ROUND HEAD	15	EA

**COVER WIPER ASSEMBLY**

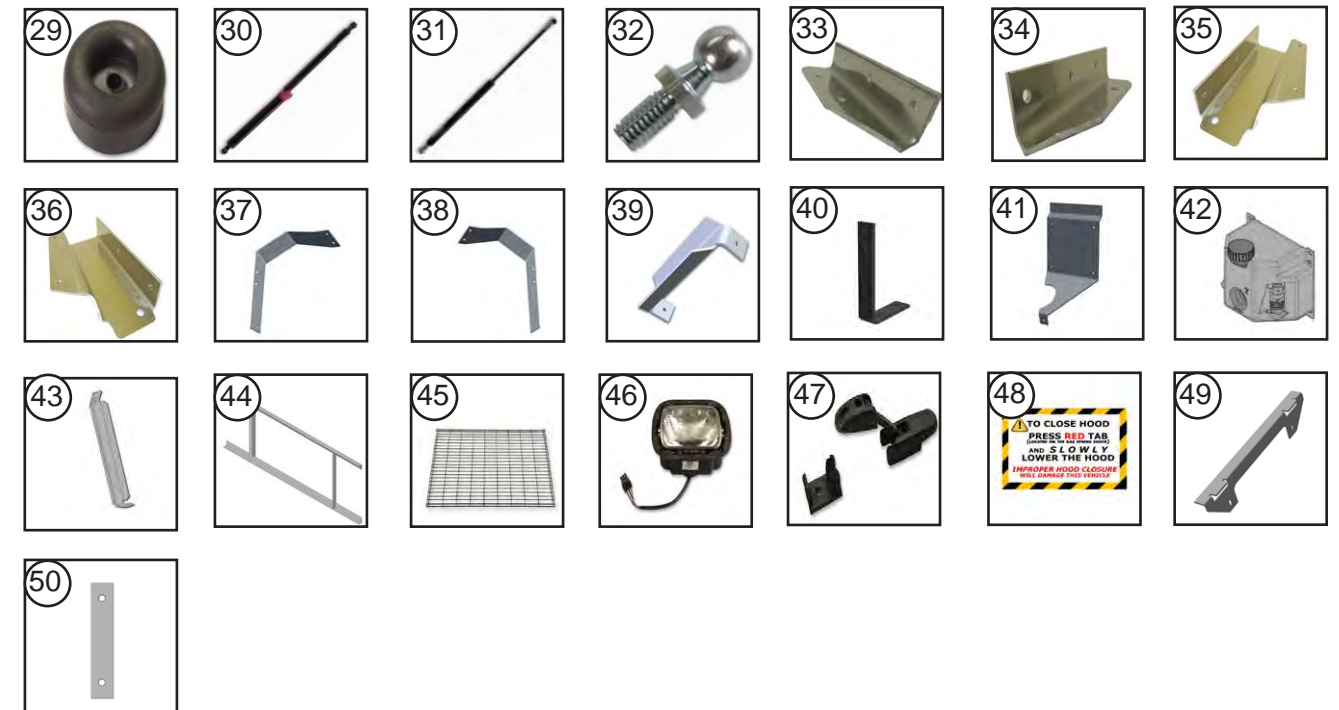
26	088076431	PLATE COVER WPR MTR AL .102X5X12	2	EA
27	088076437	COVER MOTOR WPR AL .102X10.85X87.25	1	EA
28	165076402	SHELF LOWER AL .102X16.9X90.31	1	EA
29	088076449	BRACKET MOUNTING AL .102X2.36X3.9 LH	1	EA
30	088076450	BRACKET MOUNTING AL .102X2.36X3.9 RH	1	EA
31	097076435	PLATE COVER ACC AL .070X6X28.38	2	EA
32	088076451	DIVIDER SHELF AL .102X9.01X9.46	1	EA
NS	47009600	CARPET GREY ENGINE BOX LID	3	FT



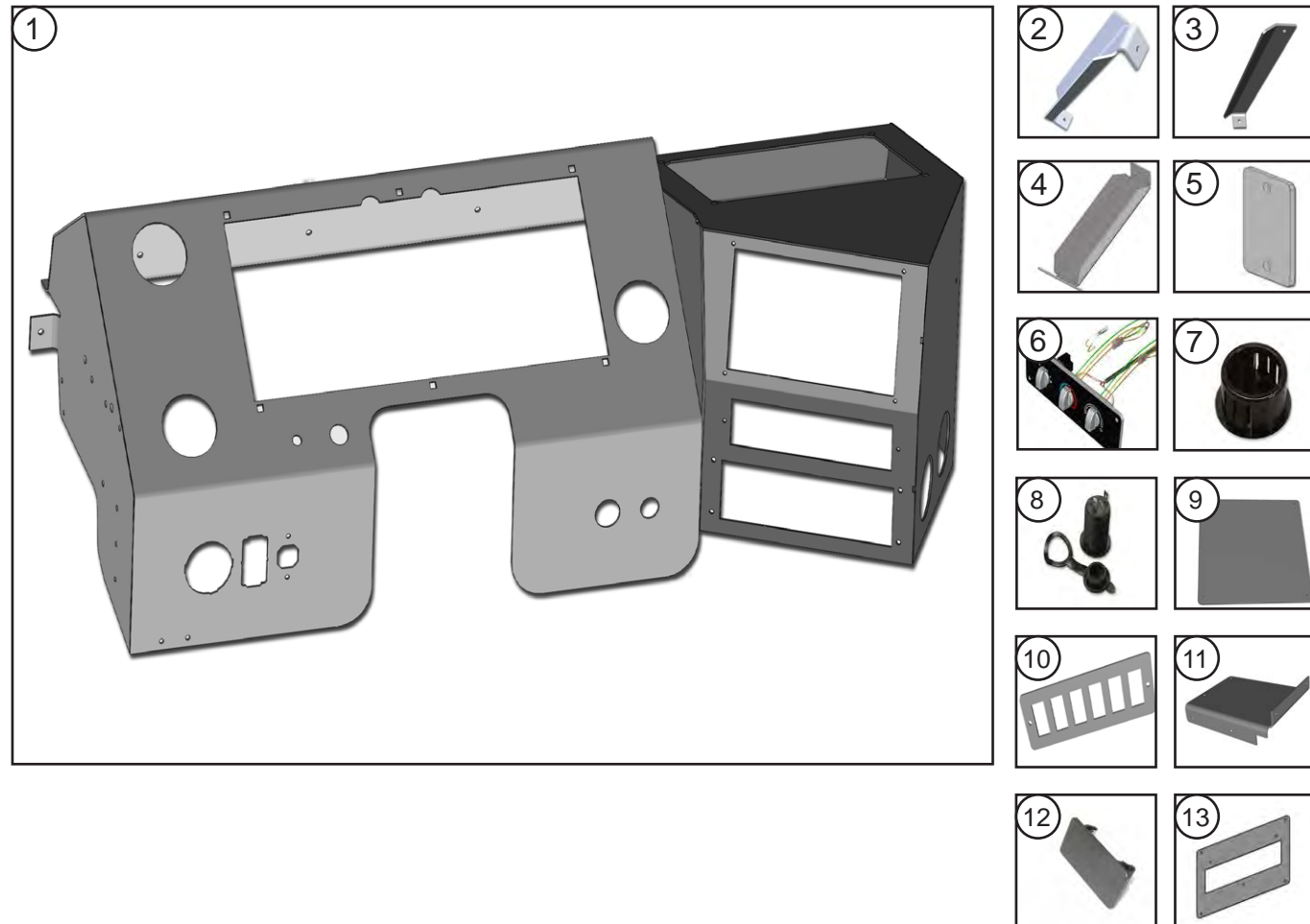
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1	555001014	HEATER CORE	1	EA
2	47008760	HEATER COIL W/GASKET & CLAMP	1	EA
3	47008753	DOOR W/SEAL	1	EA
4	47008754	BLOWER HOUSING	1	EA
5	47008755	BLOWER ADAPTER	1	EA
6	47008732	RESISTER CAGE	1	EA
7	47008357	RESISTER	1	EA
8	47008756	BLOWER MOTOR	1	EA
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	HARNESS	1	EA
14	47008580	FORMED HEATER HOSE 5/8" (.937 OD - .625 ID) 4.875"	2	EA
15	555002053	VALVE WATER	1	EA
16	105080401	PLATE MOUNTING FOOT DUMP AL .07X4.25X5.53	1	EA
17	090080401	DUCT FOOT 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 - FAN SPEED	2	EA
22	47008735	KNOB - TEMP & MODE	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	HARNESS ILLUMINATION W/BULBS	1	EA
29	47008712	HARNESS BLOWER MOTOR	1	EA
30	555001723	DEFROST DUCT CURBSIDE METAL	1	EA
31	555001724	DEFROST DUCT ROADSIDE METAL	1	EA
32	093080400	HOLD DOWN PLATE DEFROSTER DUCTS	4	EA
33	555001538	HEATER HOSE 2.5" FLEXABLE (HEATER VENTS) (CUT TO FIT)	1	FT
35	555002003	FRESH AIR INTAKE SIDE WALL	1	EA
36	555002005	FRESH AIR INTAKE @ TOEBOARD	1	EA
37	555001715	LOUVER BALL	6	EA
38	555001533	HOSE BLOWER 5"DIA X 7.5"	1	EA
38	555001532	HOSE FRESH AIR 4"	1	EA
39	002080400	BRACKET HEATER CONTROL AL .102X3X11.67	1	EA
40	555001323	DUCT HVAC PLENUM	1	EA
41	47008017	CONNECTOR STRAIGHT .62ID BLACK NYLON	2	EA



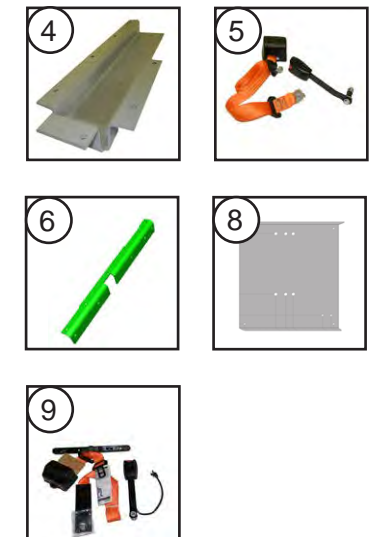
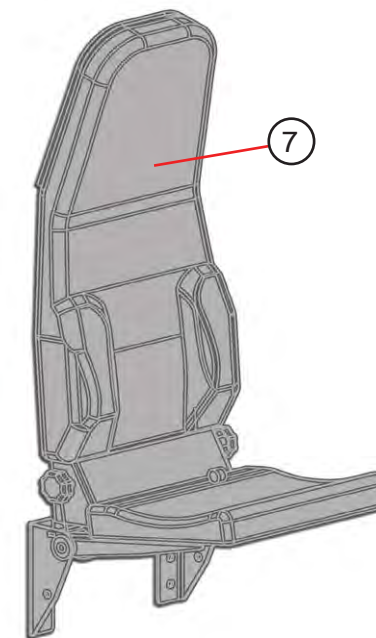
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	095017207	HOOD ASSEMBLY AL TILT 93W FORD	1	EA
2	095017405	HOOD SKIRT AL .07X27.89X29.9 ROADSIDE	1	EA
3	095017406	HOOD SKIRT AL .07X27.89X29.9 CURBSIDE	1	EA
4	47007852	HINGE ASSEMBLY	2	EA
5	105017402	PANEL HOOD AL .07X48.92X74	1	EA
6	095017407	COWL HOOD ROADSIDE AL .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	088017420	STIFFENER HOOD AL 450015X68.62	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 .5DIAX15.7	1	EA
24	45700101	MESH GRILLE 20.5X38.81	1	EA
NS	44004077	SEAL TAPE #1458BTXFT	4.42	FT



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
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	175016400	BRACKET HOOD PROP AL .188X1X9.03	1	EA
41	165063401	BRACKET BOTTLE AL .102X9.59X19.69	1	EA
42	47004505	FLUID BOTTLE WINDOW WASHER W/PUMP	1	EA
43	093063401	BRACE BOTTLE BRACKET AL .102X2.28X11.24	1	EA
44	095017203	GRILLE SUPPORT WELDMENT HOOD	1	EA
45	45700101	GRILLE MESH	1	EA
46	46000206	HEADLAMP ASSEMBLY	2	EA
47	47000613	LATCH HOOD	2	EA
48	43000903	LABEL HOOD PROPER OPERATION	1	EA
49	175015400	BRACKET HOOD REST STL7GAX7X28.53	1	EA
50	083016400	SHIM AL .102X1X5.5	2	EA
NS	92817005	SEAL TAPE	1	EA

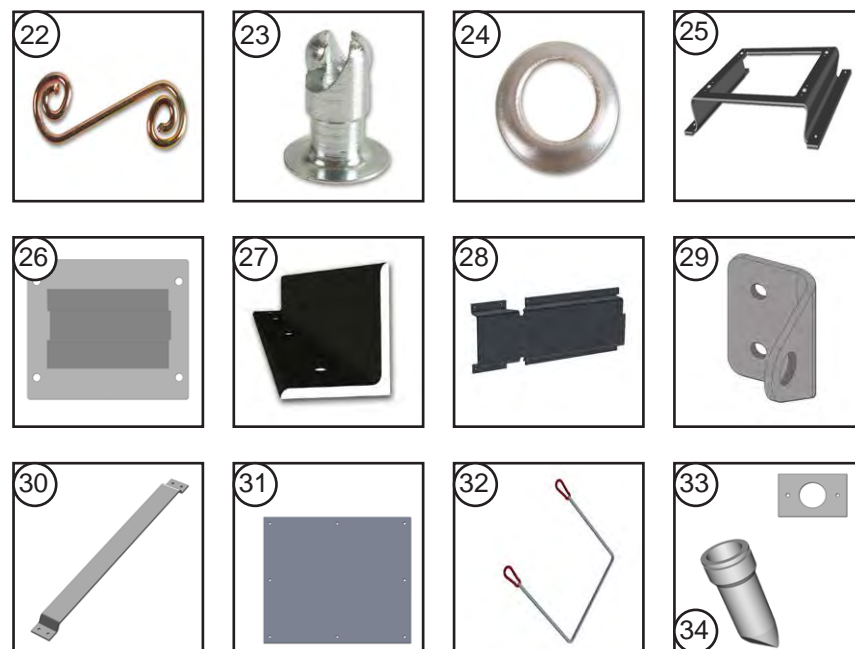
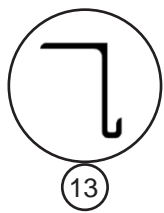
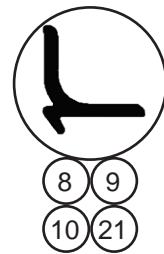
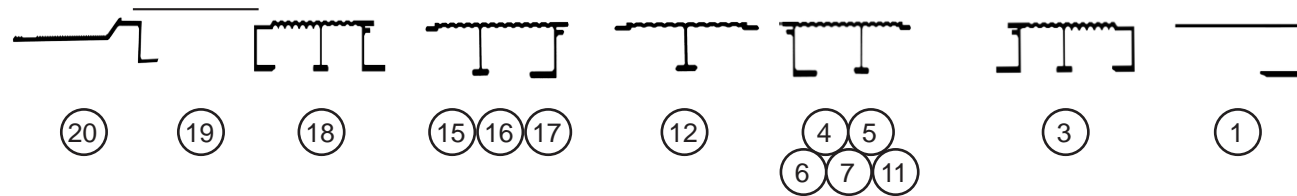
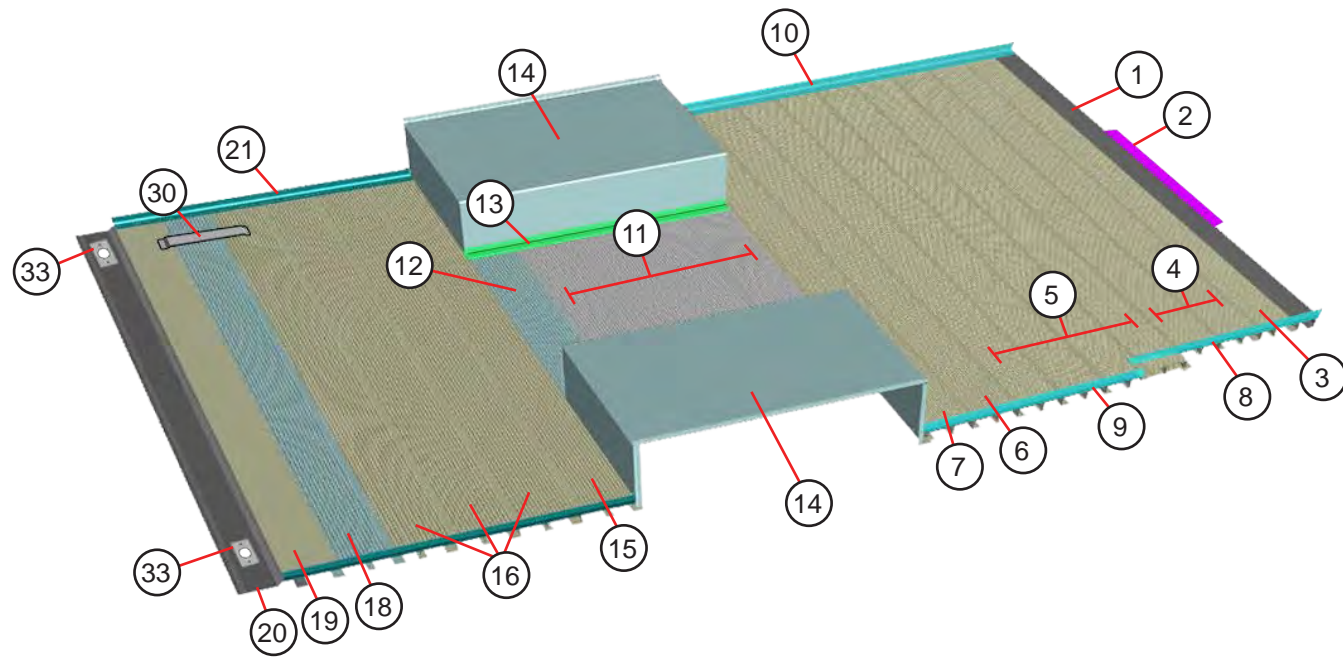


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	125027200	INSTRUMENT PANEL WELDMENT FORD	1	EA
2	095027412	BRACE INSTRUMENT PANEL AL .102X3.43X18.39LH	1	EA
3	093027402	BRACKET STIFFENER AL .125X1.91X12.66	1	EA
4	125027407	BRACKET I/P AL .102X4.32X11.06	1	EA
5	095027408	BLOCK OFF PLATE AL .102X1.32X2.30	1	EA
6	555001413	PANEL CONTROL HVAC	1	EA
7	1111513	PLUG BLACK ROUND	1	EA
8	46026378	RECEPTACLE 12 V	1	EA
9	128027421	PLATE ACC COVER RADIO AL .102X9X11	1	EA
10	118027417	PLATE FILLER 4RKR AL .07X4.5X5.5	1	EA
11	125027416	BRACKET MOUNTING AL .102X7.71X10.08	1	EA
12	46023506	PLUG BLACK ROCKER SWITCH	3	EA
13	165027400	PLATE COVER AL .07X5.74X8.64	1	EA

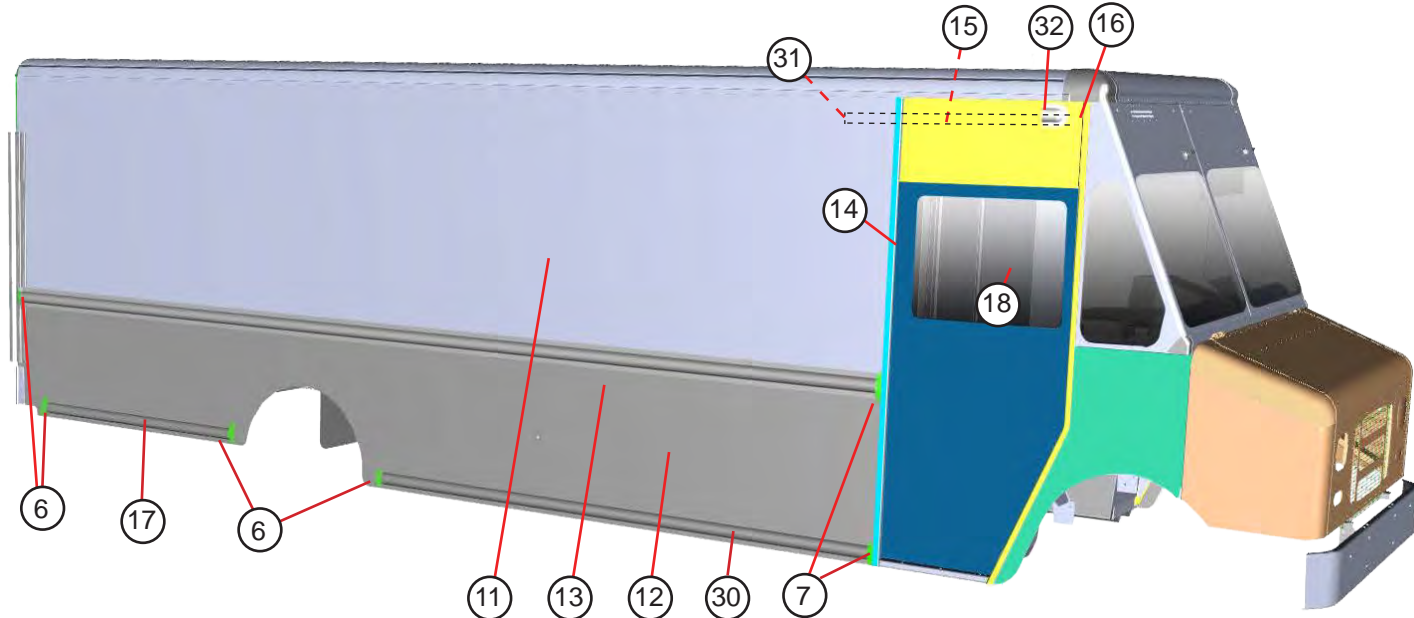
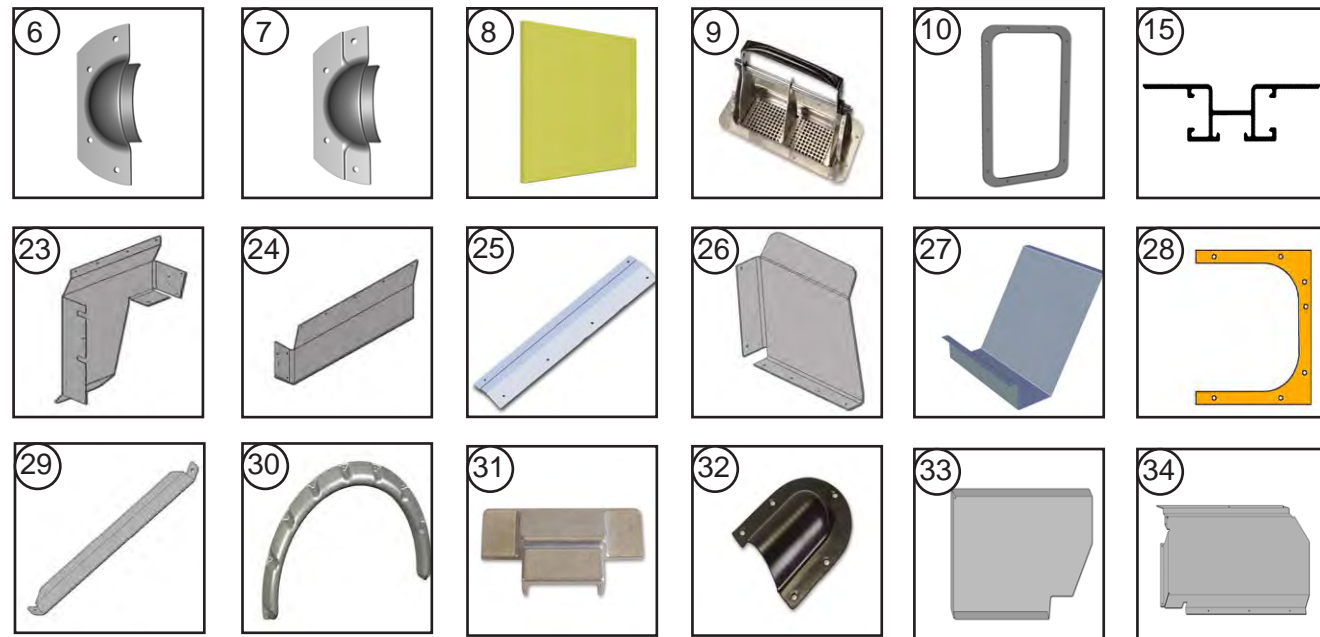
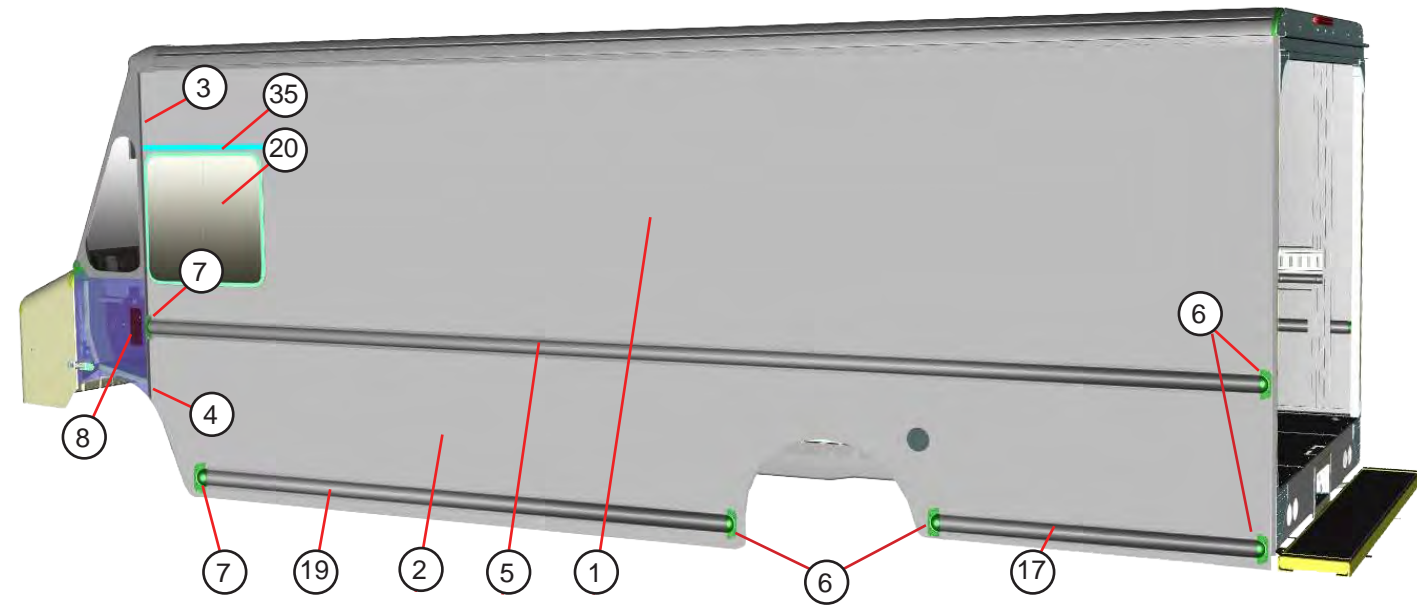


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47002685	SEAT DRIVER	1	EA
	47012685	DRIVER SEAT ONLY - WITHOUT SLIDES	1	EA
2	47002686	SEAT BASE	1	EA
3	47011208	ARM REST ROADSIDE	1	EA
4	98M582030	BRACE SUPPORT STEEL 7GAX9.43X23.43	1	EA
5	47004365	SEAT BELT WITH BOOT ADJUSTABLE D O GANGE	1	EA
6	91614300	ANGLE FLOOR .188X2.84X19.1	1	EA
7	47002687	JUMP SEAT	1	EA
8	165069400	PLATE REINFORCEMENT JUMP SEAT	1	EA
9	47042600	SEAT BELT 7" ADJUSTABLE D ORANGE	1	EA

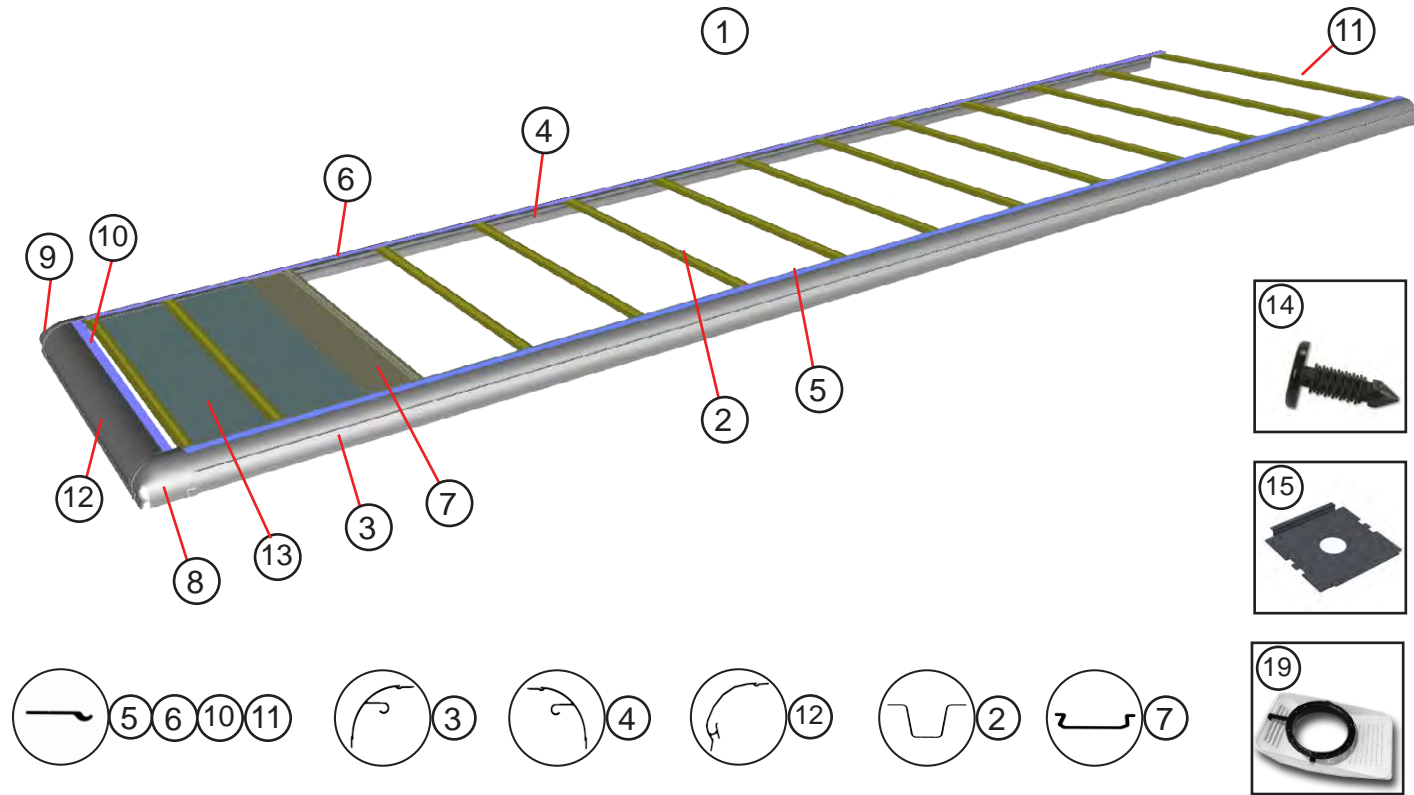




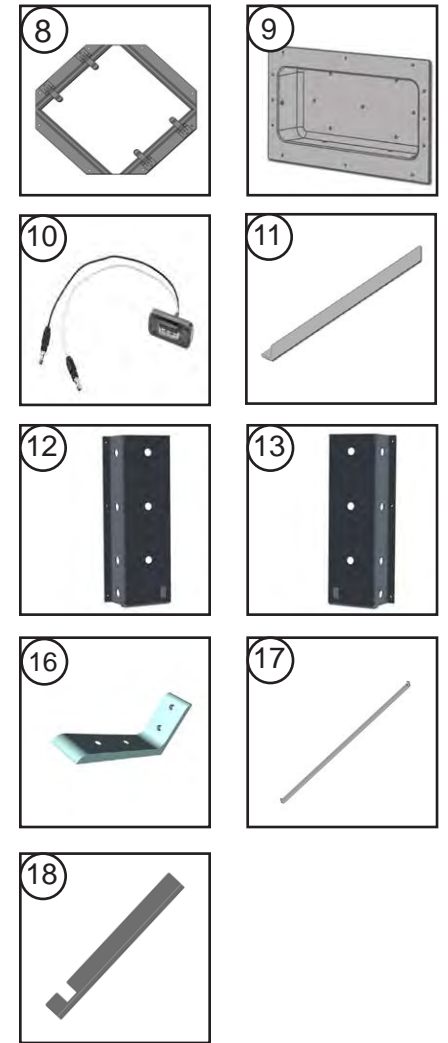
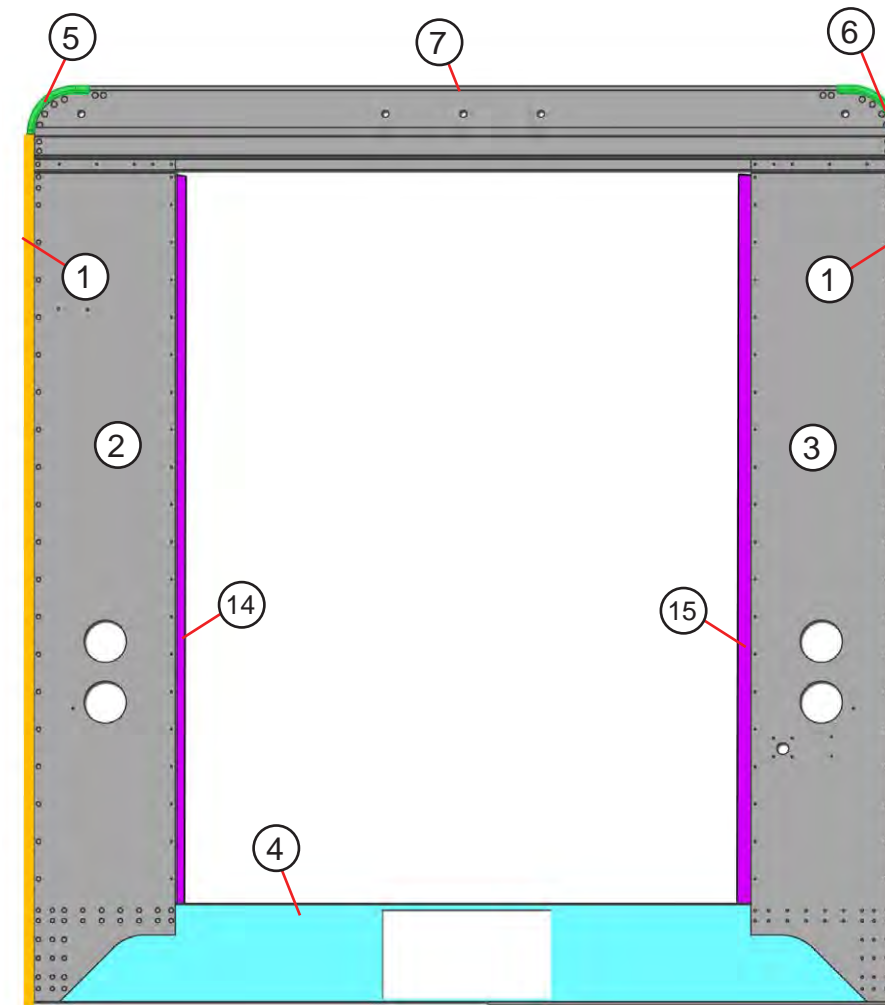
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	095031411	BEAM @ O/LINE AL 450408X89.25	1	EA
2	003330525	ANGLE STEP 450187X34	1	EA
FLOOR FORWARD				
3	095031495	BEAM FLOOR RIB ALE 450583X92.25	1	EA
4	095031443	BEAM FLOOR RIB ALE 450586X92.25	2	EA
5	095031427	BEAM FLOOR RIB ALE 450586X92.25	6	EA
6	095031452	BEAM FLOOR RIB ALE 450584X92.25	1	EA
7	095031477	BEAM FLOOR RIB ALE 450587X92.25	1	EA
8	095031424	ANGLE FLOOR AT DOOR ALE 450303X35.75	1	EA
9	095031420	ANGLE FLOOR 2DR ALE 450303X63.75 RH	1	EA
10	095031423	ANGLE FLOOR DLH ALE 450303X100	1	EA
FLOOR MID				
11	095032428	BEAM FLOOR AL 450586X49.26	4	EA
12	095032426	BEAM FLOOR AL 450585X49.26	1	EA
13	095032425	ANGLE W/BX ATTACH ALE450018X44	2	EA
14	095032206	WHEEL BOX ASSEMBLY 93W 44"	2	EA
FLOOR REAR				
15	095031477	BEAM FLOOR RIB ALE 450587X87.25	1	EA
16	095031427	BEAM FLOOR RIB ALE 450586X87.25	3	EA
18	095033417	BEAM RIB FLOOR ALE 450583X87.25	1	EA
19	095033437	PLATE FILLER REAR AL .125X9.45X92.38	1	EA
20	45059200	DROP SILL AL FLOOR 1.88X92.69 45 RMP	1	EA
21	095033413	ANGLE FLOOR AL 450303X52.19	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 AL 450187X29	2	EA
MISC				
28	165127402	BRACKET HAND CART AL .125X13.16X23.88	1	EA
29	150127456	BRACKET BUNGEE HAND CART	2	EA
30	165127401	CATCH HAND CART STL 7GAX2X23.49	1	EA
31	150127462	PANEL WEAR HAND CART AL .102X10X12	1	EA
32	45400581	BUNGEE CORD HAND CART 24" W/CARABINER	1	EA
33	97435300	PLATE MOUNTING FLOOR DRAIN AL .102X2.5X3.75	2	EA
34	47006607	DRAIN VALVE 1-1/2 X 4-1/2	2	EA



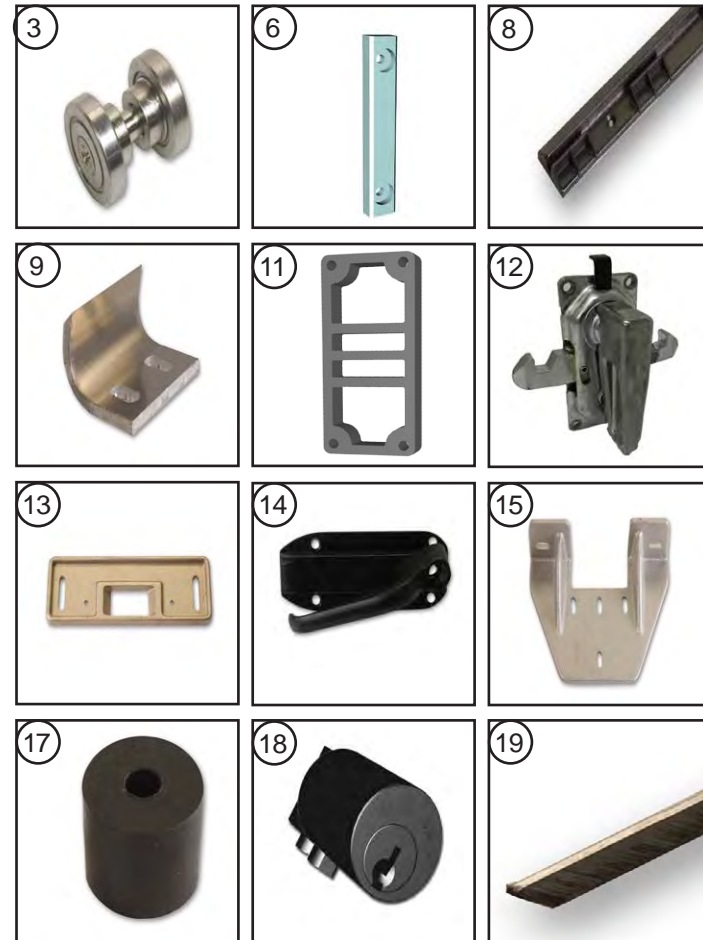
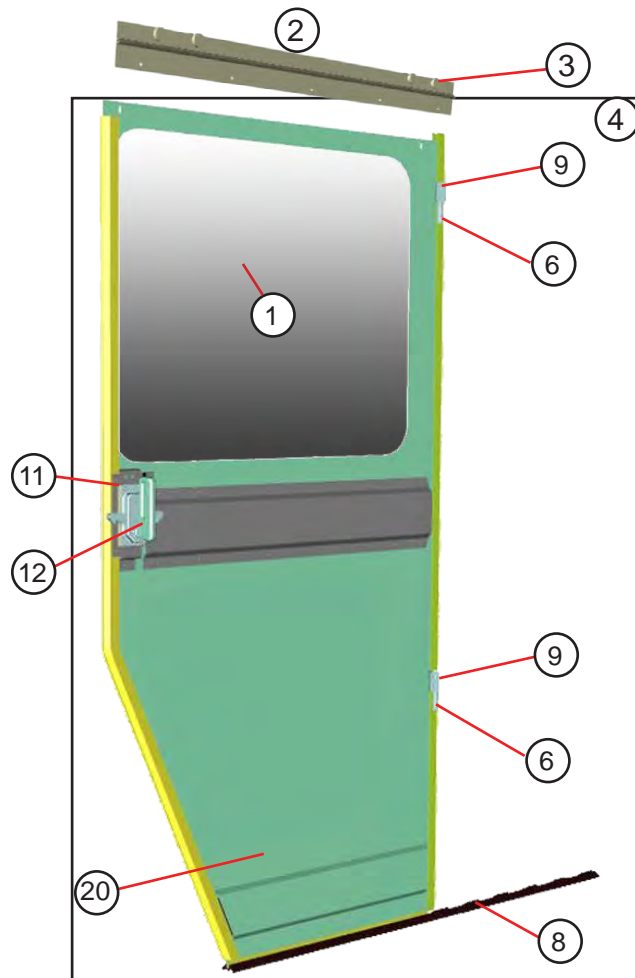
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	165046412	SIDE UPPER AL .102X56X242.31 DLH	1	EA
2	165045404	SIDE LOWER AL .102X32X242.31 DLH	1	EA
3	095044405	DOOR POST TOP AL 456110X58.93 LH	1	EA
4	095044406	DOOR POST BOTTOM AL 456110X34.68 DLH	1	EA
5	165046409	RUB RAIL AL 450002X236.31 DLH	1	EA
6	1100799	END 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
11	165038419	SIDE UPPER AL .102X56X201.31 RH	1	EA
12	175037402	SIDE LOWER AL .102X32X201.31 RH	1	EA
13	125038413	RUB RAIL AL 450002X197	1	EA
14	095038404	POST "B" AL 450274X90.18 RH	1	EA
15	083042401	STIFFENER HEADER AL RH ( 165042400 - LH )	1	EA
16	96742302	CLIP AL Z .102X3X9.57	1	EA
17	165039402	RUB RAIL LOWER REAR AL450002X49	1	EA
18	45800103	WINDOW SLIDING RH	1	EA
19	165039403	RUB RAIL LOWER FRONT AL 450002X117	1	EA
20	45800102	WINDOW SLIDING LH	1	EA
NS	093019408	STIFFENER ZEE BELOW WINDOW LH AL.07X7.59X16.19	1	EA
23	165026402	SPLASH PAN AL .125X19.95X25.13 LH	1	EA
24	165026403	SPLASH PAN AL .125X 10.42X19.2 RH	1	EA
25	113026402	ADAPTOR SPLASH PAN AL .125X3.17X16.65 RH	1	EA
26	165026404	SPLASH PAN ATTACH AL .125X14.73X16.63 RH	1	EA
27	998526302	SPLASH PAN FUEL FILL AL .07X22.5X30.44	1	EA
28	998512300	SHIM FUEL FILL	1	EA
29	001744400	GUSSETT FLOOR TO SIDE STRAP AL .125X2.1X16.02	3	EA
30	66104047	FENDER RUBBER REAR	2	EA
31	45100074	CAP RAIL END	2	EA
32	47008533	CAP PLASTIC END VENT	2	EA
33	093019417	PANEL LNR BELOW WINDOW LH AL.102X31.57X38.46 DLH	1	EA
34	093019410	PANEL LNR ABOVE WINDOW DLH AL.07X23.11X45.35	1	EA
35	89367380	DRIP RAIL OVER WINDOW AL 450006X35.32	1	EA
NS	093019413	PANEL LNR ABOVE WINDOW AL .07X15.48X44.17 RH	1	EA
NS	1109001	INSULATION FBG	2.5	FT
NS	165040000	EXTENTION HANGER EXHAUST PIPE	1	EA
NS	40300930	"U" BOLT 11GA 3.5" HANGER	1	EA



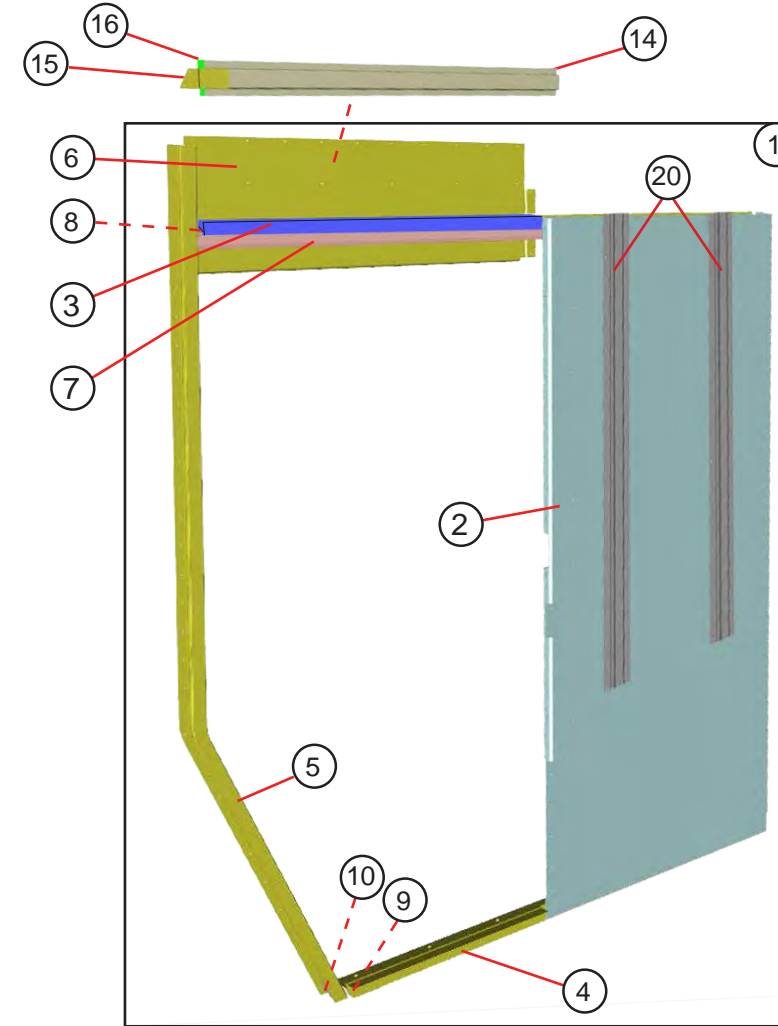
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1		<b>ROOF ASSEMBLY</b>		
2	45601603	ROOF BOW STEEL 16GA SEC456016 X89.12	10	EA
3	098010407	ROOF RAIL 16' 456144X237.25 ROADSIDE	1	EA
4	098010408	ROOF RAIL 16' 456144X237.25 CURBSIDE	1	EA
5	088010512	RAIL INTERLOCK AL 450140X237.25 ROADSIDE	1	EA
6	088010513	RAIL INTERLOCK AL 450140X237.25 CURBSIDE	1	EA
7	118010402	ROOF BEAM @ O LINE 14GA GLNX9.54X89.12	1	EA
8	077100400	CORNER CASTING ROADSIDE	1	EA
9	077100401	CORNER CASTING CURBSIDE	1	EA
10	89310506	INTERLOCK ROOF NOSE	1	EA
11	89310507	INTERLOCK ROOF TRANSOM	1	EA
12	083010400	ROOF NOSE AL 456107X82.5	1	EA
13	083011470	LINER ROOF EMB .023X39X86.99	1	EA
14	47006610	CLIP PLASTIC FLAT HEAD	52	EA
15	170115400	BRACKET ROOF VENT AL .07X24.75X27.74	1	EA
NS	45200851	ROOF SKIN FBG .075X82XFT	19.98	FT
NS	1109001	INSULATION FBG	7.25	FT
NS	100011400	POLYESTER FILL 4200200 4x22.5	3	EA
19	1114110	VENT ROOF 8" 80CFM	1	EA
NS	1114150	AIR FLOW REGULATOR ROOF VENT	1	EA
NS	47012700	SPACER RING FOR ROOF VENT	1	EA



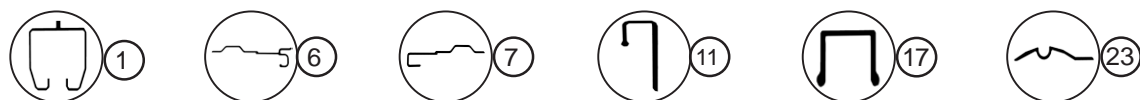
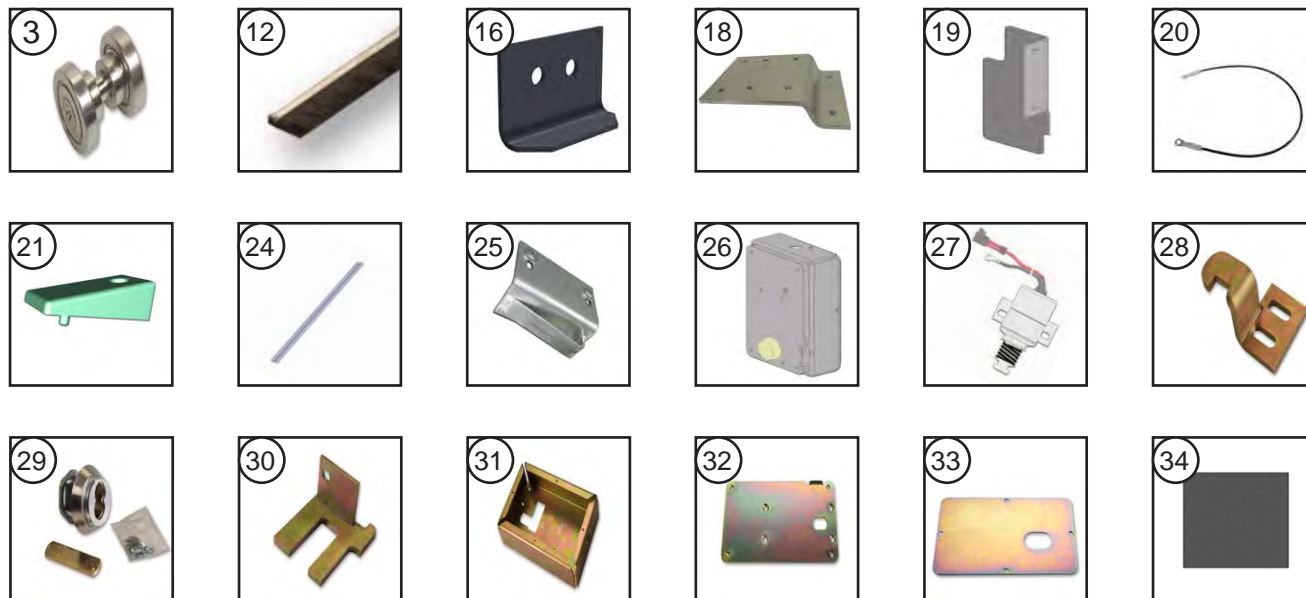
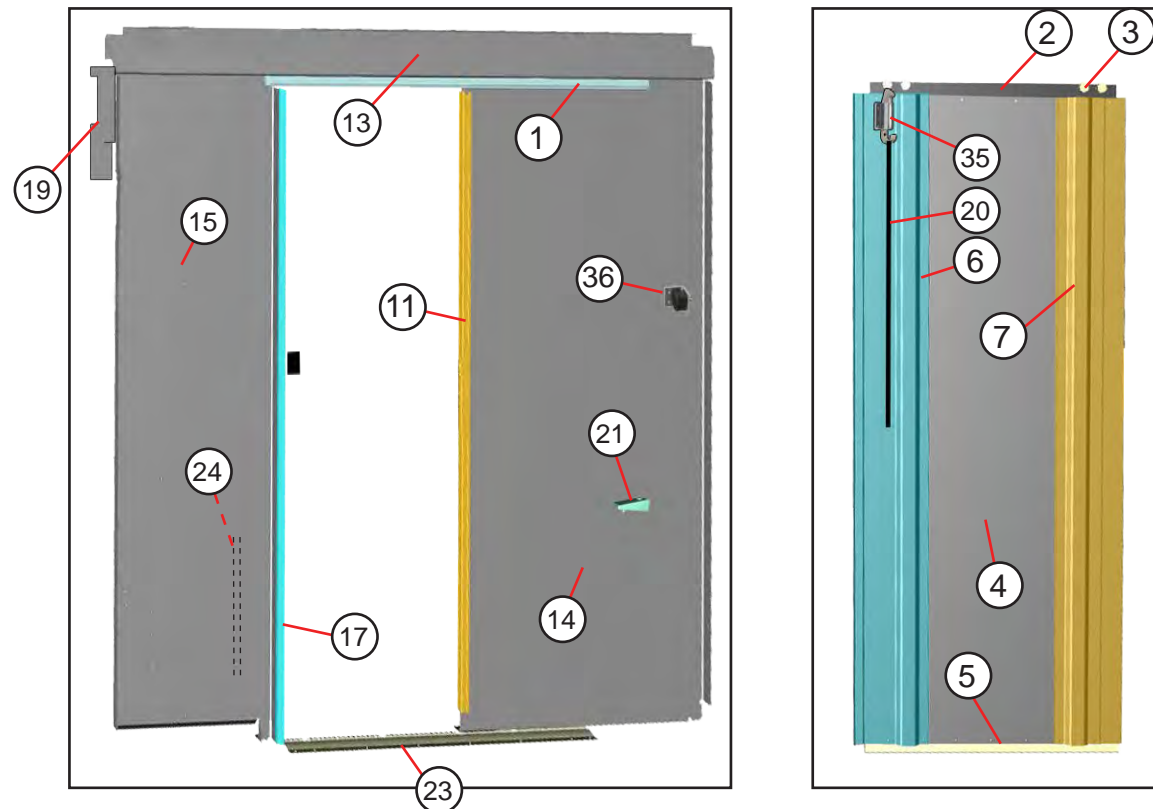
ITEM #	PART #	DESCRIPTION	QTY	UNIT
1	083053452	CHANNEL POST CORNER AL 450359X88.69	2	EA
2	175053402	PANEL BACK AL .102X15.14X86.04 LH	1	EA
3	175053403	PANEL BACK AL .102X15.14X86.04 RH	1	EA
4	083053603	SILL REAR 93W AL 450024X88.75	1	EA
5	45100009	CORNER CASTING LH	1	EA
6	45100010	CORNER CASTING RH	1	EA
7	083053401	TRANSOM REAR ROLL UP DOOR AL 450266X91.62	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	175081400	GUARD T/L AL.07X12.81X29.24 LH	1	EA
13	175081401	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	175135401	PLATE FILLER BACK AL .125X2.23X97.21	1	EA
18	175127400	WIRING COVER @ TRANSOM AL .102X7.04X58.94	1	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	45100168	LATCH MECHINISM	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	088070256	TRACK DOOR ASSEMBLY	1	EA
2	088070522	PLATE HANGER W/BRUSH AL 450515X30.63	1	EA
3	47006595	BEARING ASSEMBLY	4	PR
4	175070408	PANEL DOOR BULKHEAD AL .125X27.88X75.25	1	EA
5	088070524	WEAR STRIP BHD 452002X32.25	1	EA
6	175070406	BULKHEAD EDGE AL 450504X75.25 CURBSIDE	1	EA
7	167070401	BULKHEAD EDGE AL 450503X75.25 ROADSIDE	1	EA
11	175070407	CHANNEL BHD UPPER AL 450502X74.15	1	EA
12	44008050	SEAL BRUSH TYPE B x83.9	1	EA
13	175070411	HEADER BHD ZEE AL .102X6.77X92.4	1	EA
14	175070403	PANEL BHD AL .102X37.61X79.42 LH	1	EA
15	175070404	PANEL BHD AL .102X24.16X79.42 RH	1	EA
16	175070412	PULL HANDLE AL .102X2.76X3	1	EA
17	167070409	JAMB AL 450326X76.44	1	EA
18	92537309	PLATE MOUNTING LATCH AL .125X3X5.29	1	EA
19	175070405	PLATE FILLER UPPER AL .102X3.63X10.25 RH	1	EA
20	1113600	CABLE BULKHEAD .125X29" BLACK VINYL	1	EA
21	45200208	DOOR CHOCK NYLON	1	PR
23	96770316	GUIDE DOOR FLOOR AL 450414X47.88	1	EA
24	083069404	STIFFENER BULKHEAD @ JUMPSEAT AL 450043X72.12	1	EA
25	98770202	STRIKER WELDMENT BHD ASSEMBLY	1	EA
26	090127200	LATCH BULKHEAD ASSEMBLY	1	EA
27	46032317	SOLOINOID KEYLESS 12V W/SPRING	1	EA
28	001761437	LATCH STRIKER BULKHEAD STL .25 YL DICHR	1	EA
29	001285406	CYLINDER LOCK W/SPECIAL CAM	1	EA
30	001285226	BAR STRIKER ASSEMBLY	1	EA
31	001285430	HOUSING STEEL LAT 11GAX11.88X15.5	1	EA
32	001285425	PLATE BULKHEAD LATCH 11GAX5.76X9.38	1	EA
33	001285426	PLATE BULKHEAD LATCH 11GAX5.76X9.38	1	EA
34	47009600	CARPET GREY	18.5	FT
35	1113046	LATCH FINGER PULL	1	EA
36	5903152	DOOR STOP	1	EA

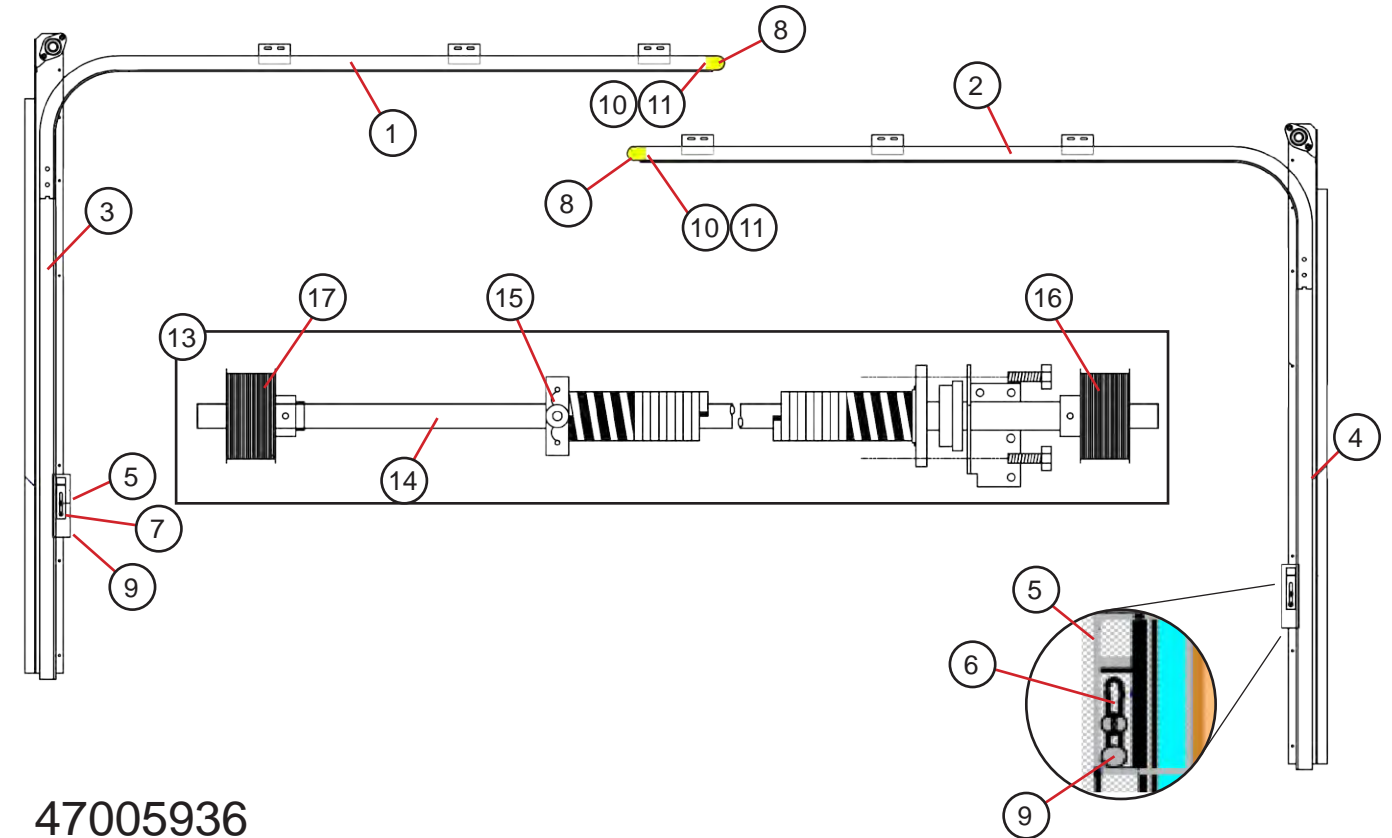
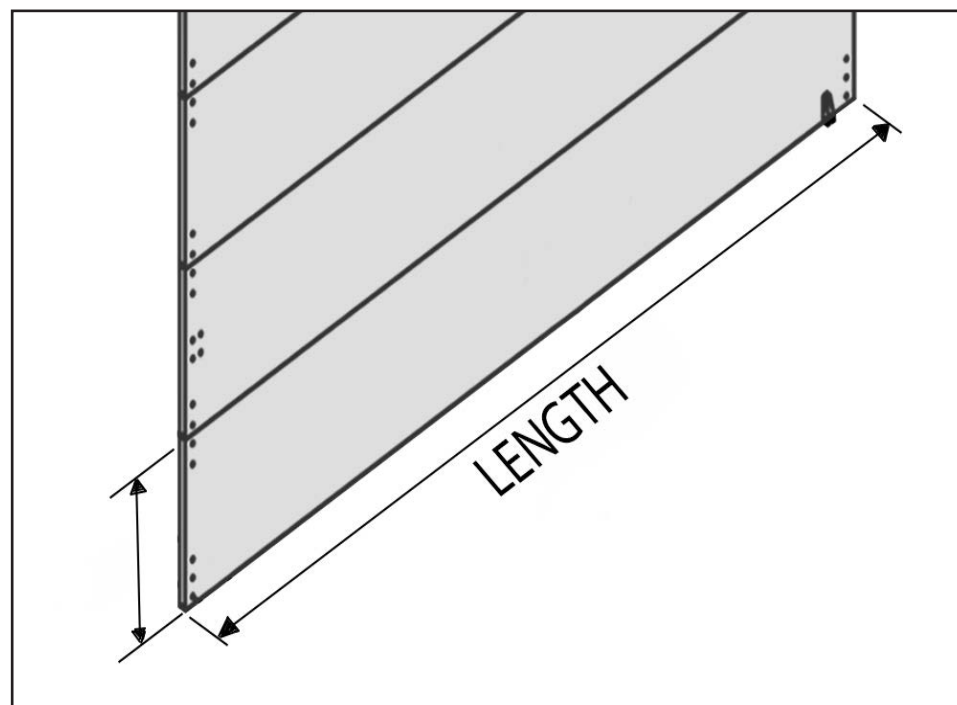


ROLL-UP DOOR SERIAL NUMBER LOCATION

WHEN ORDERING PARTS FOR ROLL-UP DOORS,  
PLEASE PROVIDE THE FOLLOWING INFORMATION.

THE SERIAL NUMBER LOCATED ON THE INTERIOR TOP PANEL ROADSIDE EDGE.  
THE LENGTH AND HEIGHT OF THE DOOR PANEL(S) TO BE ORDERED.

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

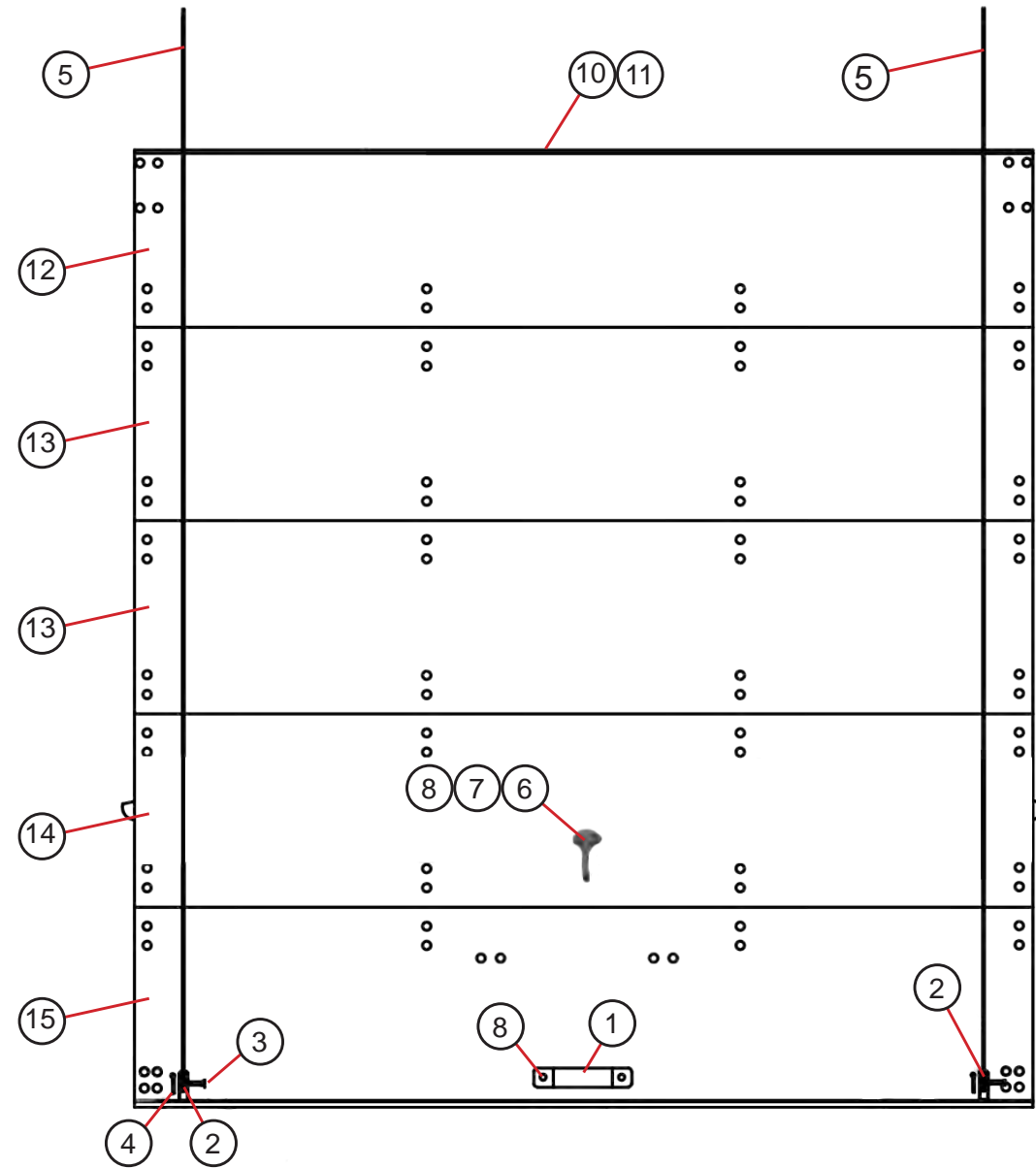


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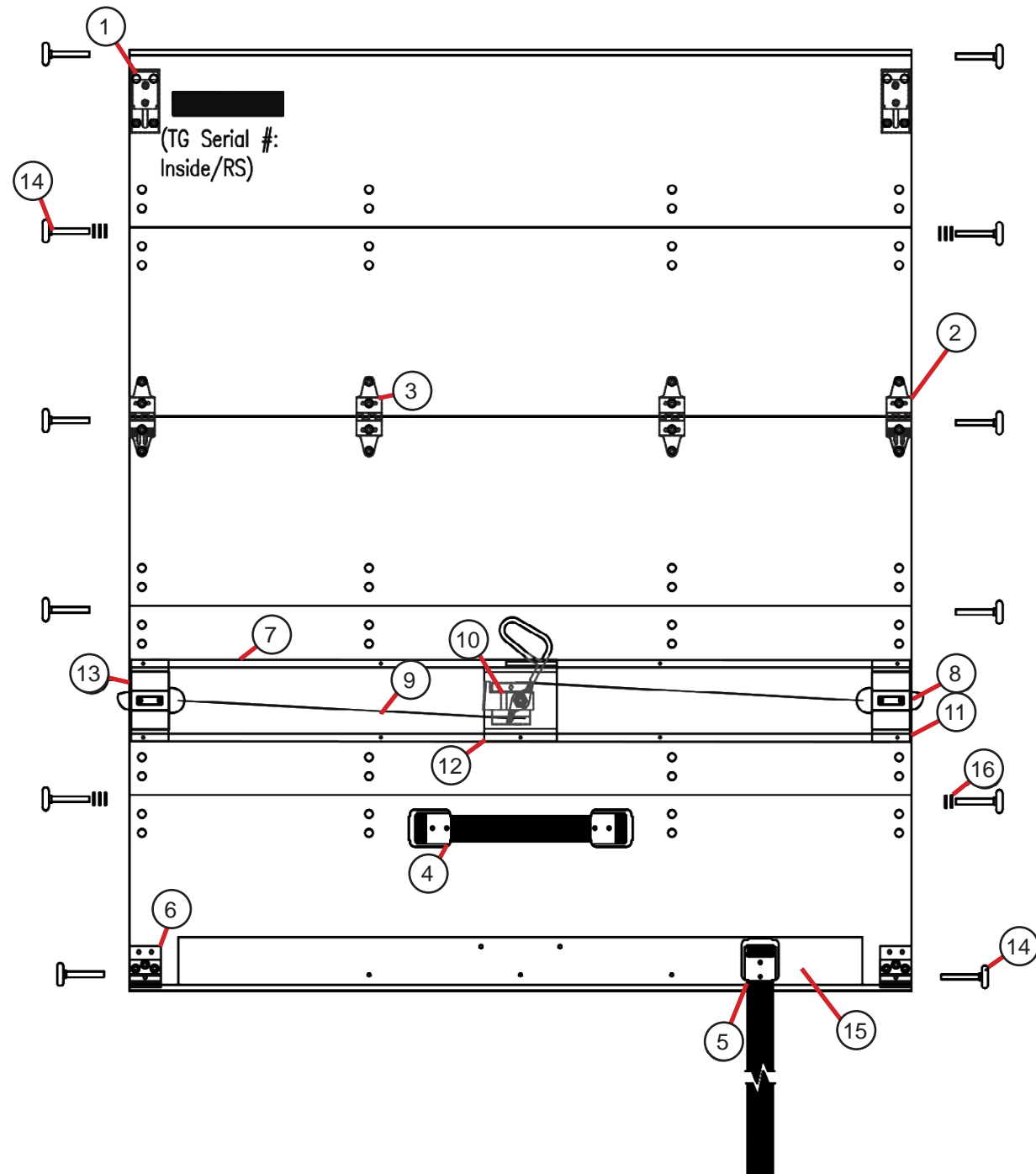
ITEM#	PART#	DESCRIPTION
1	47106850	HORIZONTAL TRACK ASSEMBLY - CURBSIDE
2	47106853	HORIZONTAL TRACK ASSEMBLY - ROADSIDE
3	47106854	VERTICAL TRACK ASSEMBLY - CURBSIDE
4	47106855	VERTICAL TRACK ASSEMBLY - ROADSIDE
5	47106740	LOCK CATCH
6	47106758	CATCH MOUNTING PLATE - LH
7	47106759	CATCH MOUNTING PLATE - RH
8	47106787	2" YELLOW HEAD PROTECTOR
9	47106744	5/16-18 KEEP NUT
10	47106746	1/4-20 KEEP NUT
11	47106788	1/4-20 X 2-1/2 HEX HEAD BOLT

**Counterbalance Assembly**

13	47106857	COUNTERBALANCE ASSEMBLY
14	47106862	COUNTERBALANCE SHAFT - 62"
15	47106858	SPRING W. PLUGS .192 SQ WIRE X 2.50 X 27.50 (RH)
16	47106753	CABLE DRUM LH (HEX HEAD SET SCREWS)
17	47106754	CABLE DRUM RH (HEX HEAD SET SCREWS)

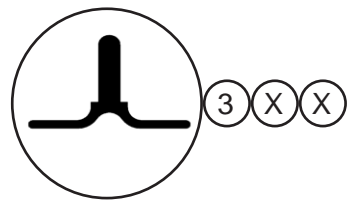
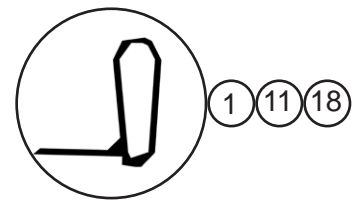
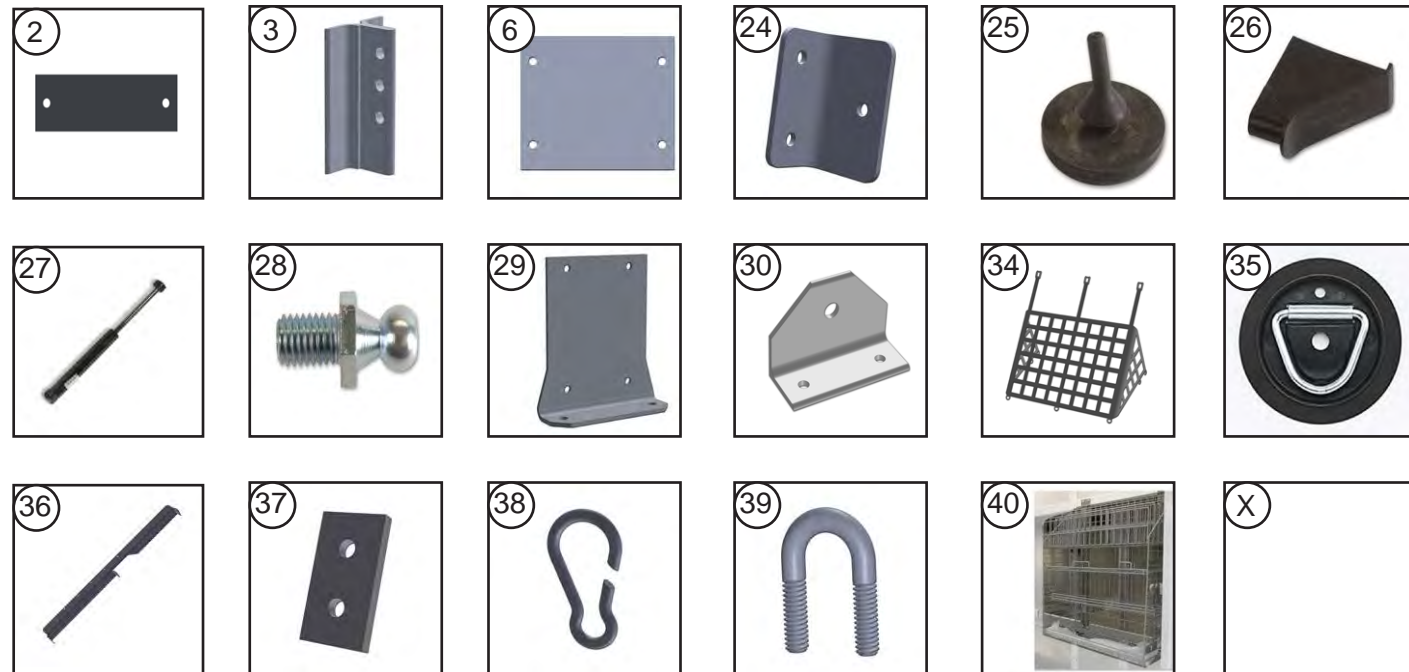
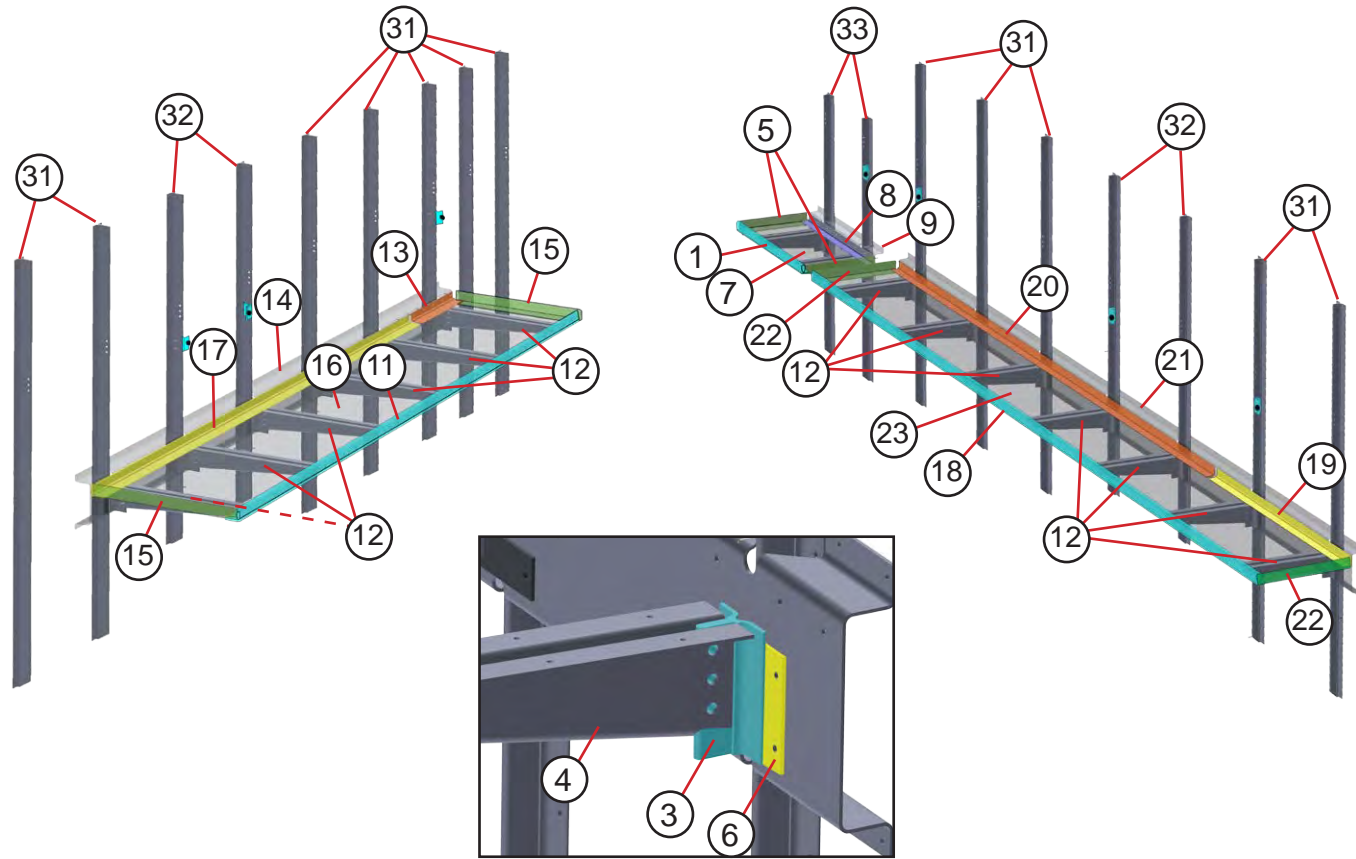


ITEM #	PART #	DESCRIPTION
1	47106796	LIFT HANDLE - BLACK
2	47106762	BRACKET CABLE ANCHOR
3	47106706	PIN CABLE ANCHOR BRACKET
4	47106719	COTTER PIN
5	47106727	CABLE SS 95" METAL EYE
6	47106774	L-HANDLE, NON-KEYED
7	47106783	10-24 X 1" SS SCREW
8	47106784	10-24 SS NYLOK NUT
9	47106802	60 INCH PULL STRAP NO-LOOP
10	47106829	TOP PANEL SEAL RETAINER
11	47106830	TOP PANEL SEAL - EXTENDED LIP
12	47106852	1/4" COMPOSITE PANEL TOP
13	47106851	1/4" COMPOSITE PANEL INTERMEDIATE X2
14	47106849	1/4" COMPOSITE LATCH PANEL
15	47106848	1/4" COMPOSITE PANEL BOTTOM

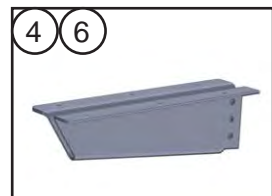
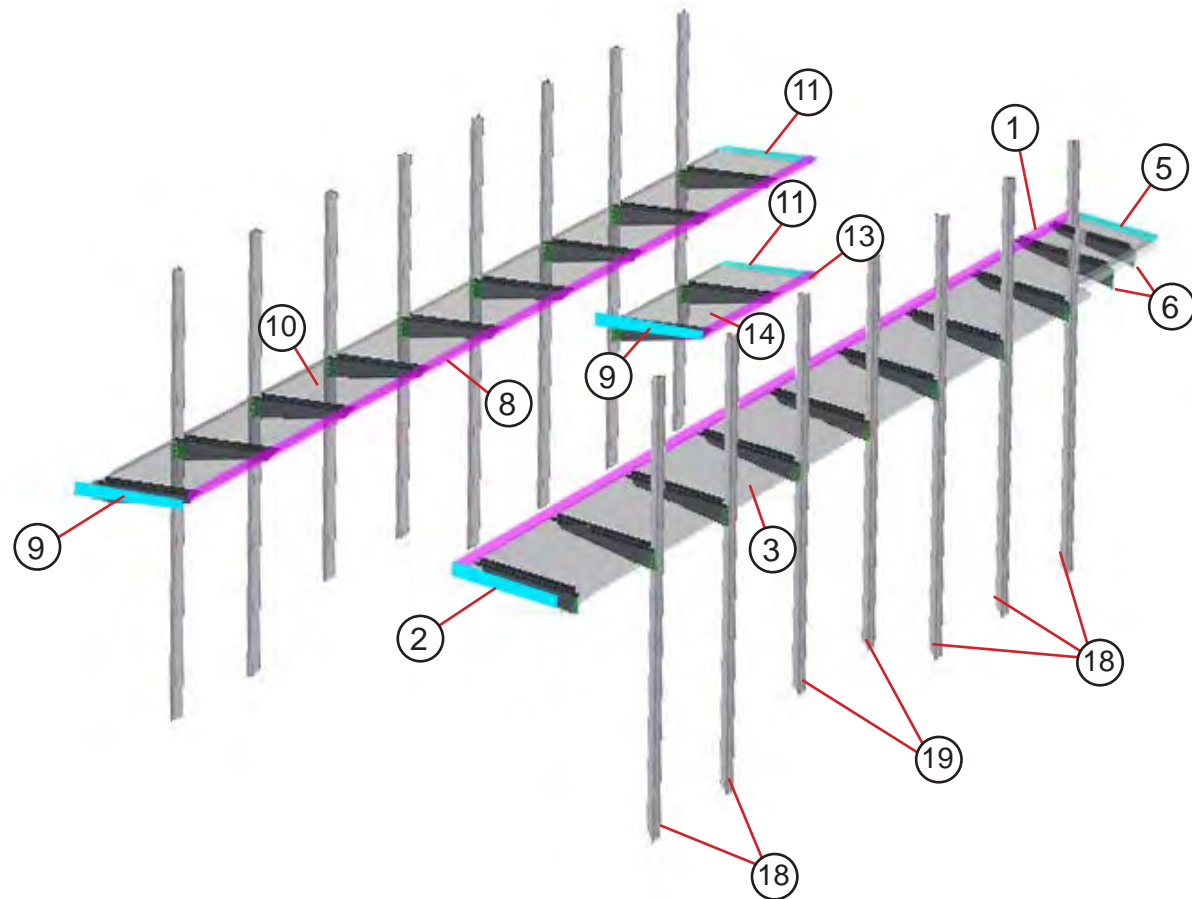


ITEM#	PART#	DESCRIPTION
1	47106710	Top Closure Complete
2	47106775	End Hinge
3	47106731	Center Hinge
4	47106837	12" Pull Strap, No Loop - 2 BLK Retainers
5	47106802	60" Pull Strap, No Loop
6	47106764	Bottom Roller Bracket Assm, 2" roller
7	47106847	Cable Cover w/ Studs - 62" Length
8	47106717	2 PT End Latch - RS
9	47106860	Cable Assembly, 2 PT Lock w/ 2 Stops & Washer
10	47106891	2-PT Center Control with D Handle
11	47106836	Latch Base End - .91" Off, PVC/Wood/13mm Comp, 2" Track
12	47106767	Latch Base Center - .91" Off, PVC/Wood/13mm Comp, 2" Track
13	47106716	2 PT End Latch - CS
14	47106765	2" HD Solid Steel Roller
15	47106861	Black 56" long Bottom Angle for .25" Composite w/ inside PS
16	47106718	Spacer Washer
NS	47106724	5/8" Stainless Steel Rivet
NS	47106725	3/4" Stainless Steel Rivet
NS	47106726	7/8" Stainless Steel Rivet
NS	47106720	11/16" Aluminum Buck Rivet
NS	47106721	13/16" Aluminum Buck Rivet

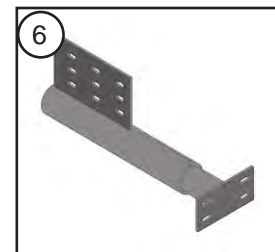
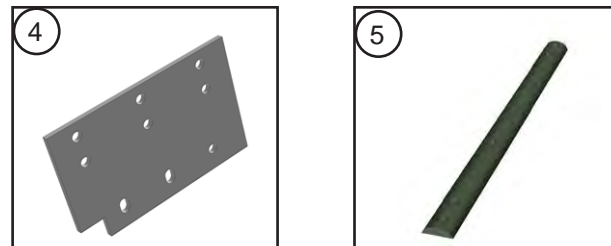
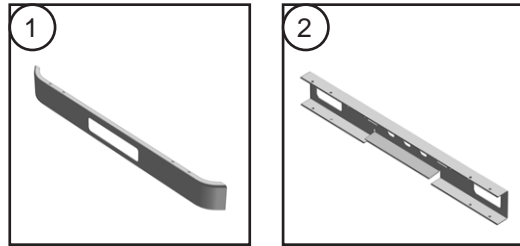
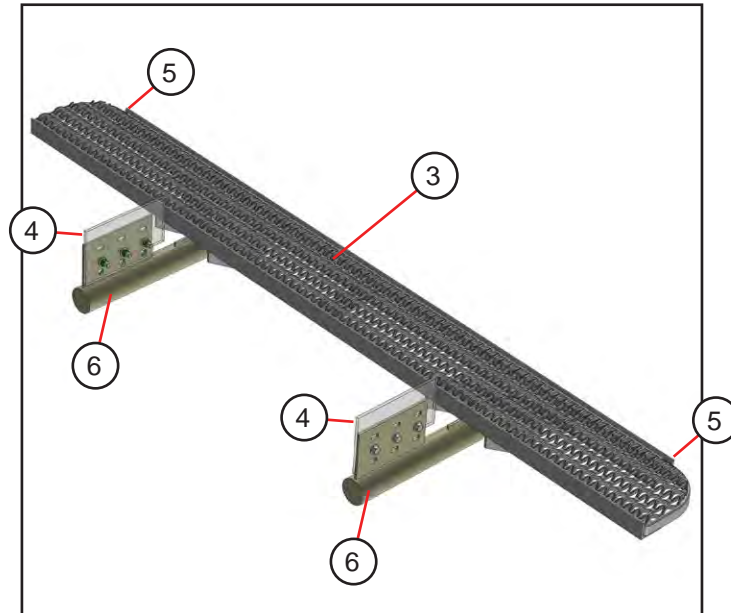
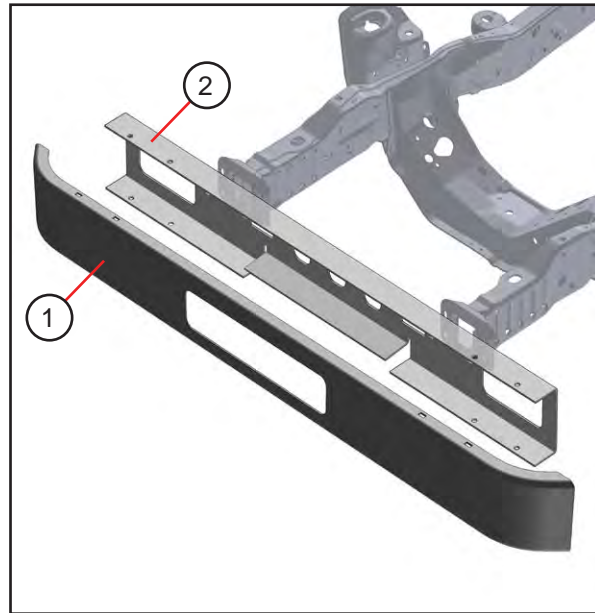




ITEM#	PART#	DESCRIPTION	QTY.	UNIT
<b>SHELF ASSEMBLY FOLDING @ DOOR POCKET CURBSIDE</b>				
1	165106425	LIP SHELF AL 450589 X27.75	1	EA
2	165106414	SPACER AL .125X1.5X4.8	2	EA
3	155106413	STANCHION SHELF AL 459919X4.5	2	EA
4	155106402	ARM SHELF AL .125X10.19X14.01	2	EA
5	155106412	ANGLE SHELF FOLDING 450523X14.75	2	EA
6	125105408	SHIM AL.125X4X4.75	1	EA
7	165106424	PANEL SHELF AL .07X14.75X27.75 RH	1	EA
8	165106418	HINGE SHELF SS STL 47007796X27.5	1	EA
9	155106408	HORIZONTAL HAT AL .125X13.16X27.75	1	EA
<b>SHELF ASSEMBLY FOLDING ROADSIDE</b>				
11	165106421	LIP SHELF AL 450589X132.75	1	EA
12	155105421	ARM SHELF AL .125X10.19 X17.01	6	EA
13	165106417	HINGE SHELF 47007796X17.38	1	EA
14	165106407	HORIZONTAL HAT AL .125X13.16X132.75	1	EA
15	155106417	ANGLE SHELF AL 450523X17.75	2	EA
16	165106420	PANEL SHELF AL .07X17.75X132.75 LH	1	EA
17	165106416	HINGE SHELF SS STL 47007796X114	1	EA
2	165106414	SPACER AL .125X1.5X4.8	6	EA
3	155106413	STANCHION SHELF AL 459919X4.5	6	EA
<b>SHELF ASSEMBLY FOLDING CURBSIDE</b>				
18	165106423	LIP SHELF AL 450589X156.75	1	EA
19	165106411	HINGE SHELF AL 470077X41.38	1	EA
12	155105421	ARM SHELF AL .125X10.19 X17.01	7	EA
20	165106416	HINGE SHELF SS STL 47007796X114	1	EA
21	165106410	HORIZONTAL HAT AL .125X13.16X156.75	1	EA
22	155106417	ANGLE SHELF AL 450523X17.75	2	EA
6	125105408	SHIM AL.125X4X4.75	3	EA
23	165106422	PANEL SHELF AL .07X17.75X156.75RH	1	EA
2	165106414	SPACER AL .125X1.5X4.8	7	EA
3	155106413	STANCHION SHELF AL 459919X4.5	7	EA
<b>BUMPER KIT FOR FOLDING SHELVES</b>				
24	150106410	BRACKET SHELF BUMPER AL .125X2.5X2.73	1	EA
25	1107102	PLUG BUMPER RUBBER	1	EA
26	1106157	PLUG BRACKET SHELF ARM	15	EA
<b>GAS SPRING ASSEMBLY</b>				
27	47006119	SPRING GAS 50LB 12/8.5	1	EA
28	47006086	STUD BALL .31-18	2	EA
29	155106428	SUPPORT GAS SPRING SHIM AL .125X4.75X6.48	1	EA
30	155106429	SUPPORT GAS SPRING AL 450188X3	1	EA
31	155048411	STIFFENER 81H T-STUD AL 459919X75.25	12	EA
32	155048412	STIFFENER 81H T-STUD AL 459919X65.75	4	EA
33	155048418	STIFFENER 81H T-STUD AL 459919X66.75 @ DR PKT	2	EA
34	47009297	NET CARGO 1" WIDE D-RINGS	1	EA
35	47006020	TIE DOWN RING	5	EA
36	150127457	SUPPORT CARGO NET AL .125X5.23X51.21	1	EA
37	150127458	SPACER AL .188X1X1.81	1	EA
38	47009294	CONNECTOR	5	EA
39	47009298	"U" BOLT	3	EA
40	47012413	WIRE BASKET ( SUPPORT BRACKET - 47009547 AL .125X2X28.5)	1	EA



ITEM#	PART#	DESCRIPTION	QTY.	UNIT
<b>SHELF ASSEMBLY FIXED UPPER CURBSIDE</b>				
1	165105425	LIP SHELF AL 45058X190.38	1	EA
2	155105417	ANGLE SHELF FIXED REAR AL 450523X19.5	1	EA
3	165105424	PANEL SHELF AL .102X21.27X190.38 RH	1	EA
4	003779410	ARM SHELF AL .125X10.45X20.02	7	EA
5	165106415	ANGLE SHELF @ DR/PKT AL 450523X17	1	EA
6	155105421	ARM SHELF AL.125X10.19X17.01	2	EA
<b>SHELF ASSEMBLY FIXED UPPER ROADSIDE</b>				
8	165105423	LIP SHLF AL 450589X166.38	1	EA
9	155105417	ANGLE SHELF FIXED REAR AL 450523X19.5	1	EA
10	165105422	PANEL SHELF AL .102X21.27X166.38 LH	1	EA
4	003779410	ARM SHELF AL .125X10.45X20.02	8	EA
11	155105418	ANGLE SHELF FIXED BULKHEAD AL 450180X20	1	EA
12	1106157	PLUG BRACKET SHELF ARM	19	EA
<b>SHELF ASSEMBLY FIXED LOWER ROADSIDE</b>				
13	165105427	LIP SHELF AL 450589X31.75	1	EA
9	155105417	ANGLE SHELF FIXED REAR AL 450523X19.5	1	EA
14	165105426	PANEL SHELF AL .102X21.27X31.75 LH	1	EA
4	003779410	ARM SHLF AL .125X10.45X20.02	2	EA
11	155105418	ANGLE SHELF FIXED BULKHEAD AL 450180X20	1	EA
18	155048411	STIFFENER 81H T-STUD AL 459919X75.25	12	EA
19	155048412	STIFFENER 81H T-STUD AL 459919X65.75	4	EA



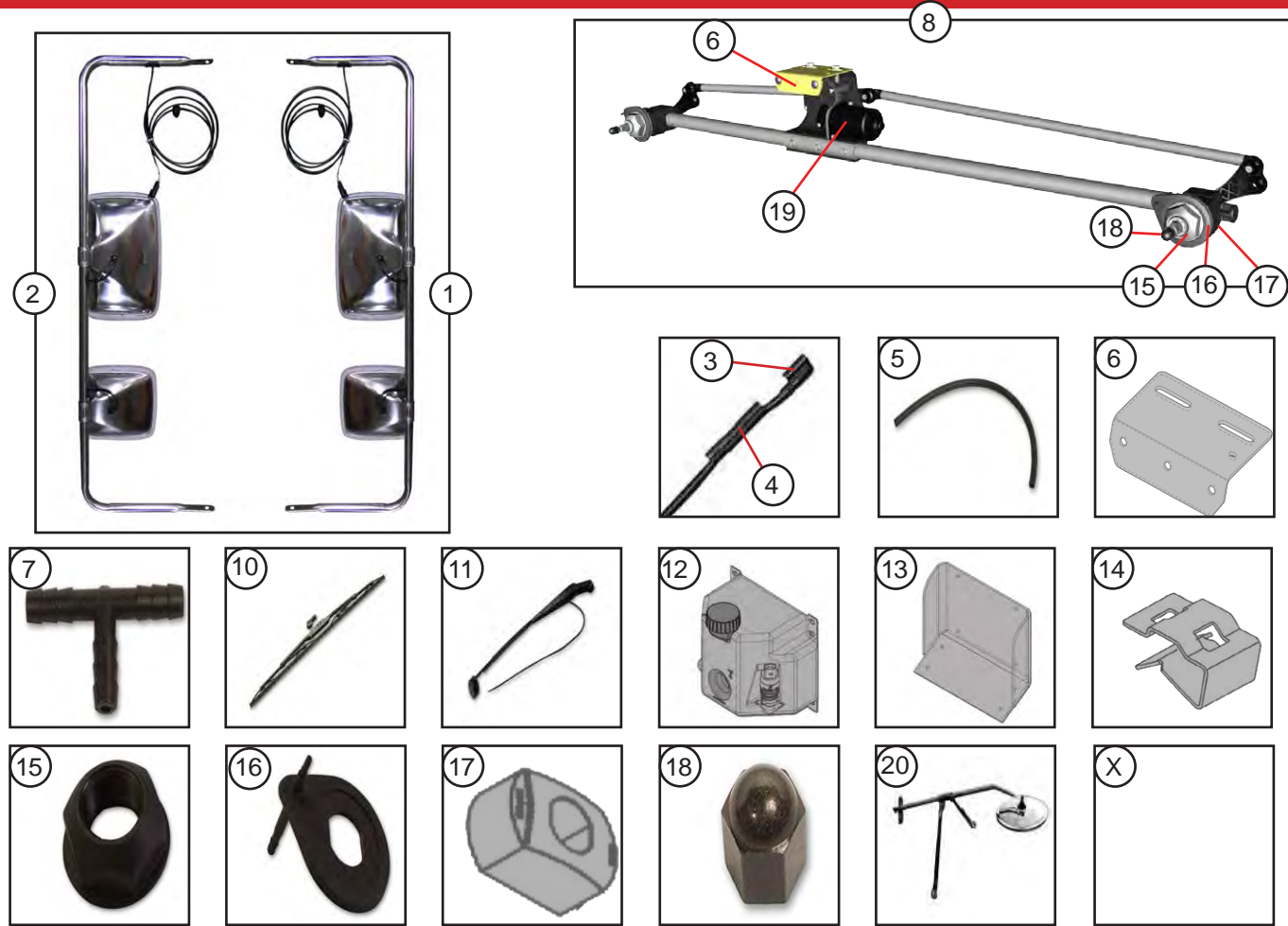
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
<b>FRONT BUMPER</b>				
1	47004269	BUMPER STEEL FRONT 93W 9IN	1	EA
2	165008402	BRACE BUMPER FRONT STL .7X15.22X73	1	EA
<b>REAR BUMPER</b>				
3	47004270	BUMPER REAR 10" DEEP	1	EA
4	175007403	PLATE HANGER STEEL .312X7X11	2	EA
5	006370401	PROTECTIVE RUBBER BUMPER X18"	2	EA
6	003057201	SHOCK BUMPER	2	EA

**CAUTION!**  
ALL DOORS AUTOMATICALLY LOCK WHEN CLOSED.  
ALWAYS CARRY YOUR ELECTRONIC KEY WITH YOU!

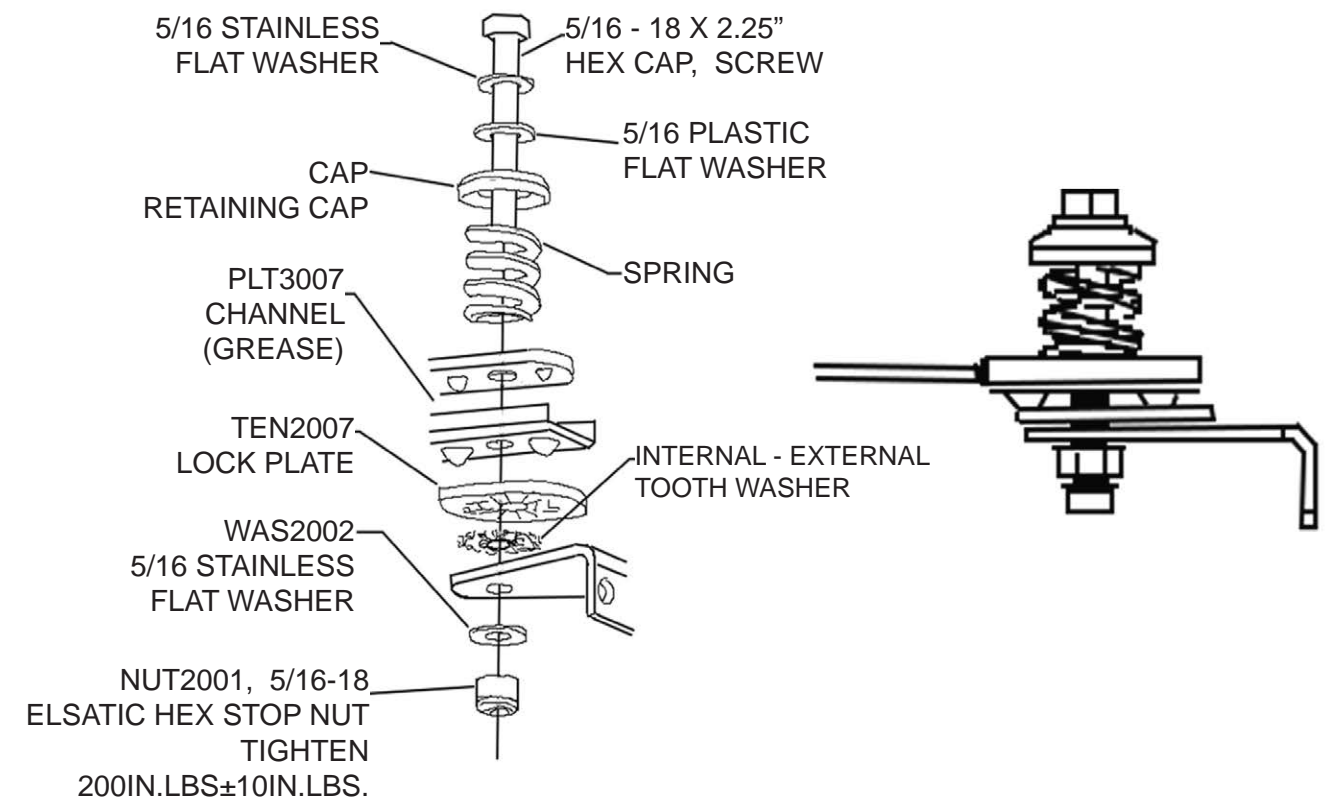
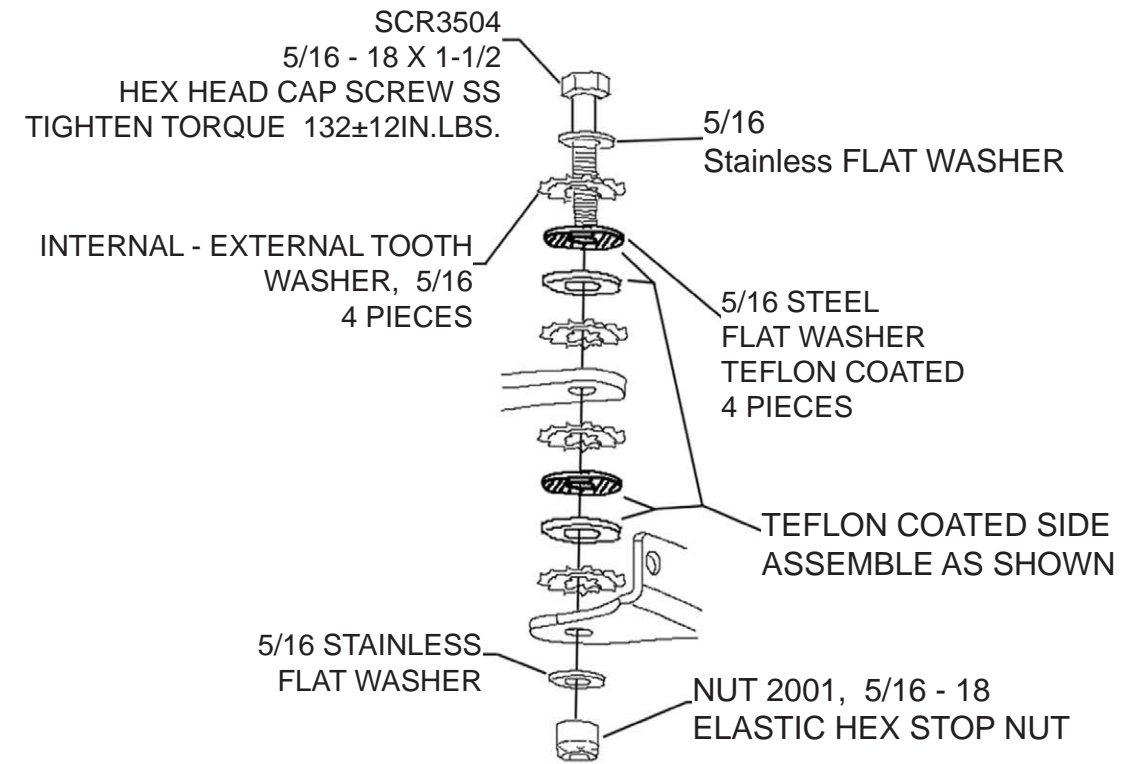
1	150127465	SHIM DUST CVR AL.18X2.63X2.63	1	EA
2	150127466	SHIM ABLOY LOCK	2	EA
3	1117835	SCR SS TR/HD PHL #10-24X1.25	4	each
4	1103354	NUT SS LK #10-24	4	EA
5	40900089	13GA STL CAM W/DICHROMATE COAT	1	EA
6	47000993	ABLOY LKCYL W/2KEYS W/DUST CVR	1	EA
7	136060401	RECP WP MODIFIED 136060400	1	each
8	40300270	SCR STL PN/HD #2-56X.25	2	EA

REMOVE COVER INCLUDED ON CYLINDER BEFORE INSTALLATION  
REF BACK PANEL OF TRUCK

ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	46029044	KEYLESS RF MODULE w/ 3 FOBS	1	EA
2	46029045	REPLACEMENT KEY FOB	1	EA
3	46032317	SOLENOID KEYLESS ENTRY CURBSIDE	1	EA
4	160074201	LATCH ASSEMBLY KEYLESS RUD	1	EA
5	N/A	LABEL - DOOR LOCK CAUTION	2	EA
6	46023511	SWITCH ROCKER DOOR UNLOCK SPST	1	EA
7	107093401	GUARD REAR SWITCH AL .102X3.25X9.12	1	EA
8	107093402	PLATE SWITCH REAR AL .125X2.06X3.13	1	EA
9	001761437	LATCH STRIKER STEEL .25 BULKHEAD DOOR	1	EA
10	46029042	LOCK ASSEMBLY KEYLESS CURBSIDE DOOR	1	EA
11	150127017	KEYLESS OVERRIDE RUD W/COVER	1	EA
11-6	47000993	CYLINDER LOCK W/ 2 KEYS (RUD LOCK OVERRIDE)	1	EA

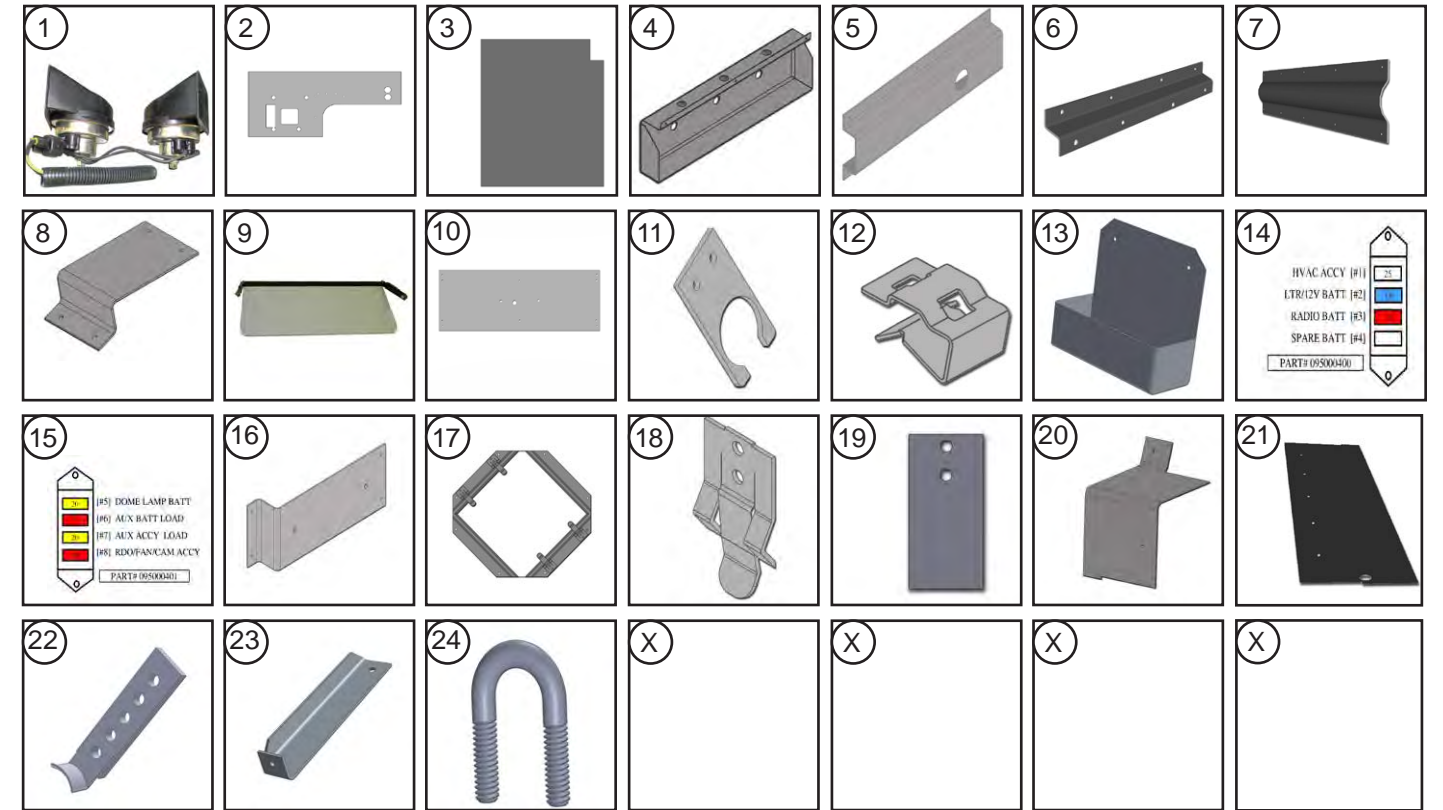


ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	47006169	MIRROR ASSEMBLY ROADSIDE HEATED	1	EA
2	47006170	MIRROR ASSEMBLY CURBSIDE HEATED	1	EA
3	47004271	WET KIT FOR WIPER ARM (SPRAY NOZZLE & HOSE)	1	EA
4	47004272	RETAINER CLIP FOR HOSE 2"	1	EA
5	1107122	HOSE .188 ID WSW	12	FT
6	083055454	BRACKET WIPER MOTOR	1	EA
7	1101694	TEE WSWA U/T	1	EA
8	47004188	WIPER SYSTEM TBLR 2 PIVOT	1	EA
10	47004134	BLADE 24IN BLACK	1	EA
11	47004206	ARM WSW WET 22IN RADIAL BLACK	1	EA
12	47004505	RESERVOIR W/PUMP WINDSHIELD WASHER	1	EA
13	165063400	BRACKET MOUNTING RSVR AL .25X14.9X17.58	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	81600189	ACORN NUT	2	EA
19	47005900	MOTOR WINDSHIELD WIPER	1	EA
20	47005099	MIRROR ASSEMBLY FRONT SIDE VIEW (10" MIRROR ONLY 47005611)	1	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	46004402	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	998512001	FUEL FILL REINFORCEMENT BRACKET	1	EA
12	46025018	REFLECTOR 2.88" AMBER	2	EA
13	46025017	REFLECTOR 2.88" RED	4	EA
14	47001084	GRAB HANDLE OFSET	1	EA
15	47001047	GRAB RAIL POWDER COATED YELLOW	1	EA
16	47001082	GRAB HANDLE .5" X 17"	1	EA
17	90187300	GRAB HANDLE .5X15.7	1	EA
18	47009656	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 (SHOWN WITH FRONT PANEL - 165127403)	1	EA
22	150107400	HOLDER FIRST AID KIT	1	EA
23	006526401	PANEL SPLASH VINYL .125X19.25X51.6	2	EA
24	98150310	GRAB HANDLE AL 450243X26.38	2	EA
25	47009706	SUPPORT BRACKET MUD FLAPS	2	EA



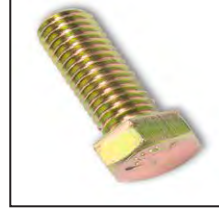
ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	115085004	HORN		EA
2	095116400	INSULATION DASH WALL	1	EA
3	175026400	SPLASH PAN FILLER 45200014X9X9	1	EA
4	165081400	GUARD LAMP REAR AL .07X11.2X21.25	2	EA
5	155127400	GUARD MARKER LAMP AL 450039X16.44	2	EA
6	097105453	GUARD WIRING BULKHEAD KYLS AL .07X1.85X20	1	EA
7	7600858	STIFFENER AL 450003X33.5DLH SLIDING WINDOW	1	EA
8	165019400	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	46021114	CLIP MEDIUM (LARGE - 46021115)	1	EA
13	150107400	HOLDER FIRST AID KIT AL .07X14.09X14.44	1	EA
14	095000400	LABEL FUSE BLOCK LH	1	EA
15	095000401	LABEL FUSE BLOCK RH	1	EA
16	165094400	BRACKET MOUNTING JUNCTION BOX REAR WIRING	1	EA
17	43001401	PLACARD FRAME	1	EA
18	47009300	SPRING CLIP PLACARD	1	EA
19	165119400	BACKER PLATE PLACARD CLIP	1	EA
20	135024409	PLATE FILR AL .07X5.83X12.57 DLH SLIDING WINDOW	1	EA
21	083005452	PLATE FILR AL .07X4.08X27.58 DLH SLIDING WINDOW	1	EA
22	40300929	STRAP HANGER	1	EA
23	165040400	BRACKET HANGER AL .125X2.54X12.04	1	EA
24	40300930	"U" BOLT 3.5"	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	4600213	HEADLAMP ASSEMBLY	2	EA
2	4600615	LAMP PARK / TURN (GROMMET - 46004403 x2)	2	EA
3	46002272	LAMP COMBO S/T/T WITH BACKUP (SHOWN W/ GROMMET)	2	EA
3	46002222	LAMP COMBO S/T/T W/O BACKUP LAMP	2	EA
4	46001339	LAMP CLEARANCE MARKER LED AMBER	4	EA
4	46001362	LAMP CLEARANCE MARKER LED AMBER	1	EA
5	46001382	LAMP CLEARANCE MARKER LED AMBER P2 D/FUNC	4	EA
6	46001340	LAMP CLEARANCE MARKER LED RED P2	2	EA
7	46001380	LAMP CLEARANCE MARKER LED RED P2 D/FUNC	3	EA
8	46001384	LAMP CLEARANCE MARKER LED RED PC	2	EA
9	47009642	LAMP LICENSE PLATE CLEAR LED	1	EA
10	46002637	LAMP DOME LED CAB (MOUNTING BRACKET - 100092400)	1	EA
11	47006065	RING TUBE STEEL 4IN ROUND FLG MTD	1	EA
12	46002638	LAMP DOME LED CARGO (BRACKET - 100092401)	2	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	46029061	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	46002427	LAMP LED CLEAR STEPWELL	2	EA
21	46003017	LAMP INTERMITANT WIPER	1	EA
NS	168084203	IDLE TIMER CONTROL 3 MIN	1	EA



ITEM #	PART #	DESCRIPTION	QTY.	UNIT
1	48200164	MONITOR BACK UP CAMERA (MOUNT - 48200193)	1	EA
2	46029042	LOCK KEYLESS ENTRY CURBSIDE	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	46030011	FAN 2 SPEED 270 CFM	1	EA
7	46027623	BOOT E/BLK HEATER WEATHER PACK CHROME RECEPTICLE	1	EA
8	46027624	PLUG 5-15 E/BLK HEATER WEATHER PACK CHROME	1	EA
9	46027625	RECEPTICLE 5-15 FLEX CABLE BLACK	1	EA
10	46027377	RECEPTICLE CHROME FOR BLANKET HEATER CORD	1	EA
11	46025305	SWITCH MAGNETIC REED NORMALLY OPEN	1	EA
11	46025302	SWITCH MAGNETIC REED NORMALLY OPEN RUD AJAR	1	EA
12	46032312	TIMER 30 MIN 10A W/O RELAY	1	EA
13	46032336	TIMER 20 SECOND 10A MAX	1	EA
14	150127459	SUPPORT WIRE RACK AL .125X2X28.5	2	EA
15	46032341	TIMER 10 MINUTE 10A W/O RELAY	1	EA
16	48200167	CABLE - CAMERA TO MONITOR	1	EA
17	48200191	CAMERA BACK UP (CAMERA SUN VISOR - 48200192)	1	EA
18	165127400	COVER WIRE @ TRANSOM AL .102X7.04X58.94	1	EA
19	46032345	BATTERY LOW VOLTAGE DISCONNECT	1	EA
20	097105454	GUARD WIRING @ BULKHEAD KEYLESS AL .07X1.85X14	1	EA
21	167073402	BRACKET RUD MAGNETIC SWITCH	1	EA



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	20															
1/4"	Hex Cap Screw	20			1101688		1117009										
1/4"	Hex Cap Screw	20		1117816		1117010							1117818				
1/4"	Hex Cap Screw	20			1117819												
5/16"	Hex Cap Screw	18				1117804											40300737
5/16"	Hex Cap Screw	18			1117803												
5/16"	Hex Cap Screw	18				1117803											
5/16"	Hex Cap Screw	16				1117837											
3/8"	Hex Cap Screw	18				1117049		1117055									
3/8"	Hex Cap Screw	16			1117843												
3/8"	Hex Cap Screw	16			47012646												
3/8"	Hex Cap Screw	16	40300056	40300054													
3/8"	Hex Cap Screw	16				1117805											
7/16"	Hex Cap Screw	20					1217000										
1/2"	Hex Cap Screw	13															
1/2"	Hex Cap Screw	13				1117121								1117050			1117035
1/2"	Hex Cap Screw	13															
1/2"	Hex Cap Screw	13												1117043	1117124	1117051	
1/2"	Hex Cap Screw	13													051461		
5/8"	Hex Cap Screw	11															40300259

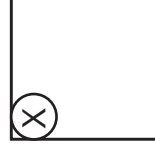
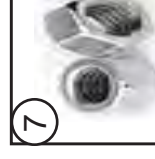
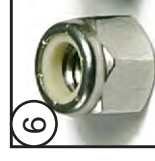
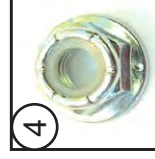
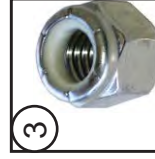
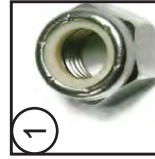
	<b>Grade 5</b> Medium Carbon Steel
	<b>Grade 8</b> Medium Carbon Alloy Steel
	<b>Grade 2</b> Low or Medium Carbon Steel

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

Genuine OEM Parts

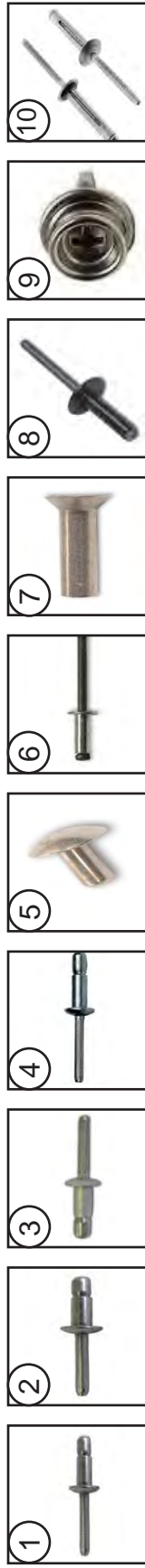
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ZP - ZINC PLATED

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			
<b>GRADE 5</b>																	
NUT STL LK LRG FLG GD5 .31-18	18	4								40100560							
NUT STL HEX LK B ZP .5-13 GR 5	13	1															1117283
<b>Stainless</b>																	
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												
<b>Specialty</b>																	
CHANNEL NUT WITH SPRING 1 X 1-1/4"	20	9			47009988												

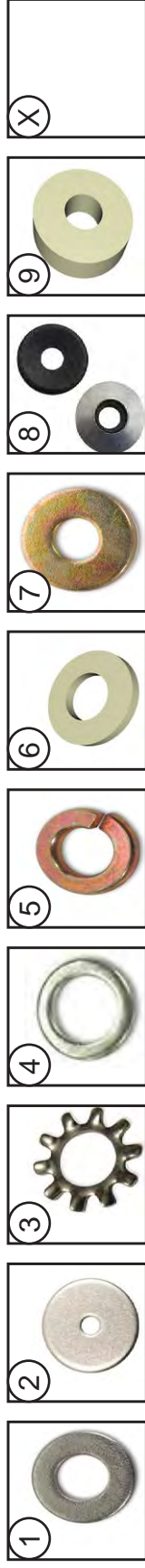


		Length												
MAGNA LOCK	Diameter	Fig.	.25	.312	.375	.438	.44	.5	.562	.625	.687	.75	.875	1"
HUCK R6-4	.188	1		1117084	1117061									
HUCK R8-6	.25	2		1117087										
PROTRUDING HEAD	.25	3			40200304		40200634			40200303				
FLUSH HEAD B6-4	.25	4						40200630						
RIV AL BRAIZER HEAD	.125	5		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						1117438						
RIV AL FLAT HEAD POP	.25	7								40200630				
RIV AL DOME HEAD BLIND	.125	10	1117464											
RIV AL DOME HEAD BLIND	.188	10	1117456							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
<b>Grade 8</b>											
5/16 USS FLAT WASHER GR 8 ZC/Y	5/16	7						1117937			
3/8 USS FLAT WASHER GR 8 ZC/Y	3/8	7							1117947		
3/8 SAE FLAT WASHER GR 8 ZC/Y	3/8	7					40000046				
7/16 USS FLAT WASHER GR 8 ZC/Y	7/16	7								1217002	
1/2 SAE FLAT WASHER GR 8 ZC/Y	1/2	7							1117943		
<b>Stainless 18-8</b>											
#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							
<b>Specialty</b>											
WASHER NYLON .13 X .62 ID X 1.38OD	5/8	9									137147429

Genuine OEM Parts

1.800.233.4823

www.morganolsonparts.com





	Diameter	Fig.	Length																	
			.625	.75	.875	1"	1-1/4"	1-1/2"	2-1/4"	2-1/2"	3"									
<b>18-8 Stainless</b>																				
PHILLIPS TRUSS M/S 18-8 SS	8 - 32	1	1117716																	
PHILLIPS TRUSS M/S 18-8 SS	10 - 24	1	1117814	40300498																
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		40300809					1117782											40300631
PHILLIPS ROUND M/S 18-8 SS	10 - 24	6		1117209																
6 LOBE PAN T/C M/S 18-8 SS	1/4 - 20	9							1117815											
<b>Standard Steel RoHS</b>																				
PHILLIPS ROUND M/S ZC/ROHS	8 - 32	6								1117839										
PHILLIPS PAN TEKS/3 ZC/ROHS	10 - 16	5																		
PHILLIPS TRUSS M/S ZC/ROHS	10 - 24	1																		
PHILLIPS TRUSS M/S ZC/ROHS	10 - 32	1	1117723																	
<b>T/C - Thread Cutting</b>																				
PHIL PAN T/S TYPE A ZC	10	8																		
PHIL TRUSS T/S TYPE A BLK	10	4																		
PHIL PAN T/S TYPE A BLK	10	7																		
PHIL PAN T/S TYPE A ZC	12	8																		
6 LOBE PAN T/C	1/4 - 20	9																		40300042



T/C Thread Cutting    6 Lobe    Type A  
Genuine OEM Parts

1.800.233.4823

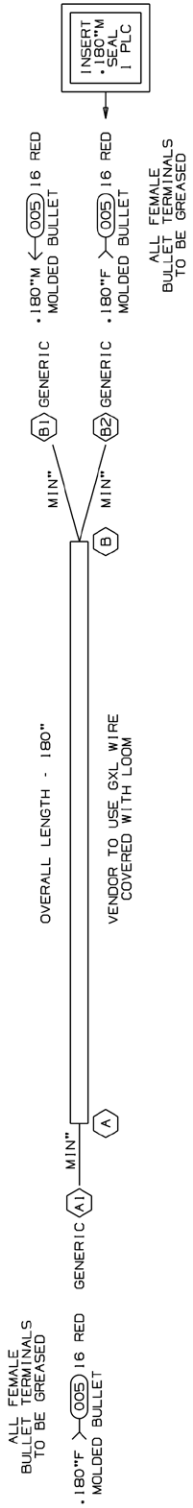
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# WIRING HARNESS

PAGE#	PART#	DESCRIPTION	QTY.	UNIT
50	007388315	HARNESS JUMPER Y 1WR P&P X180	3	EA
51	007388322	HARNESS JUMPER Y 2WR P&P X120	1	EA
52	007388323	HARNESS JUMPER Y 2WR P&P X36	1	EA
53	46025591	HARNESS SPEAKER	1	EA
54	47004506	HARNESS PIGTAIL PUMP WSWA 2015	1	EA
55	082091200	HARNESS PWR OPTION FROM BAT	1	EA
56	88117437	HARNESS JUMPER TEE GNRC	1	EA
57	88117487	HARNESS SWITCH MAGNETIC REED	1	EA
58	090051201	HARNESS MIR HTD W/RKR SW	1	EA
59-60	090091202	HARNESS ROOF / NOSE	1	EA
61	092094203	HARNESS POWER KEYLESS SPCL	1	EA
62	095084202	HARNESS FUSE CTR RSF 2009 M-100	1	EA
63-66	095084204	HARNESS I/P RSF 2009 M-100	1	EA
67-68	095088201	HARNESS WIPER/ENG	1	EA
69-73	115084206	HARNESS COM CENTER	1	EA
74	117067201	HARNESS SEAT SENSOR WIRING	1	EA
75	132088206	HARNESS BATTERY POS 2GA BRKR 24"	1	EA
76	135085204	HARNESS HD LED E-SERIES 2013	1	EA
77	137392203	HARNESS JUMPER STPWL LMP W/RLY LED	1	EA
78	140088200	HARNESS JUMPER Y 2WR P&P X48	1	EA
79	155084203	HARNESS SWITCH RAD OFF REV TRIG W/RLY	1	EA
80	157388200	HARNESS JUMPER SPCL CHSML ICC	1	EA
81	167081200	HARNESS JUMPER 3WR	1	EA
82-83	167086202	HARNESS REAR WIRING	1	EA
84	167093200	HARNESS ROOF	1	EA
85	167094202	HARNESS KEYLESS ROOF/NOSE CS/BLKH/RR	1	EA
86	167094203	HARNESS KEYLESS RF CS/BLKH/RR	1	EA
87	167094204	HARNESS JUMPER SWITCH REAR DOOR	2	EA
88	167094205	HARNESS KEYLESS RF Y	1	EA
89	167094206	HARNESS KEYLESS DASH	1	EA
90	177095201	HARNESS JUMPER SB SENSE GND	1	EA
NS	48200165	CABLE BACKUP MONITOR POWER	1	EA

DRAWING NO.	REV	SHT
007388315		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.
- 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 ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

NOTES:

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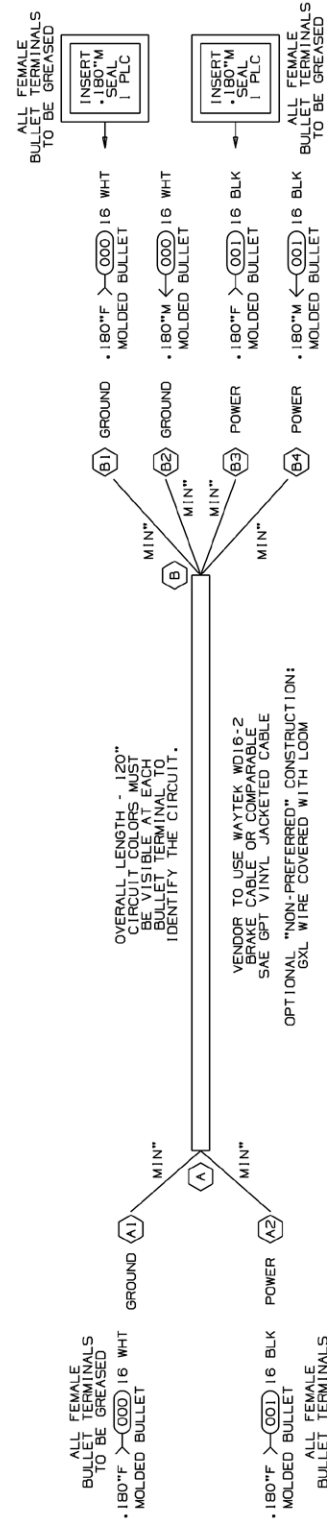
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**HARNESS AND LOOM TOLERANCES**  
 UP TO 60" : -0/+2"  
 60" TO 100" : -0/+4"  
 100" TO 200" : -0/+5"  
 200" TO 400" : -0/+6"  
 400" TO 600" : -0/+7"  
 OVER 600" : -0/+8"  
 BO TO BO : -0/+2"  
 TOLERANCE IS NOT APPLICABLE TO OVERALL HARNESS LENGTH,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

FIRST USE: STRIP, AMP, WASH, LC, DOOR SWITCH

DRAWING NO.	REV	SHT
007388322		1 OF 1
DESCRIPTION	RELEASE TO PRODUCTION	
BY	CHK	DATE

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 ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

NOTES:

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GENERAL STANDARDS UNLESS OTHERWISE NOTED: XXXX . . . 010	
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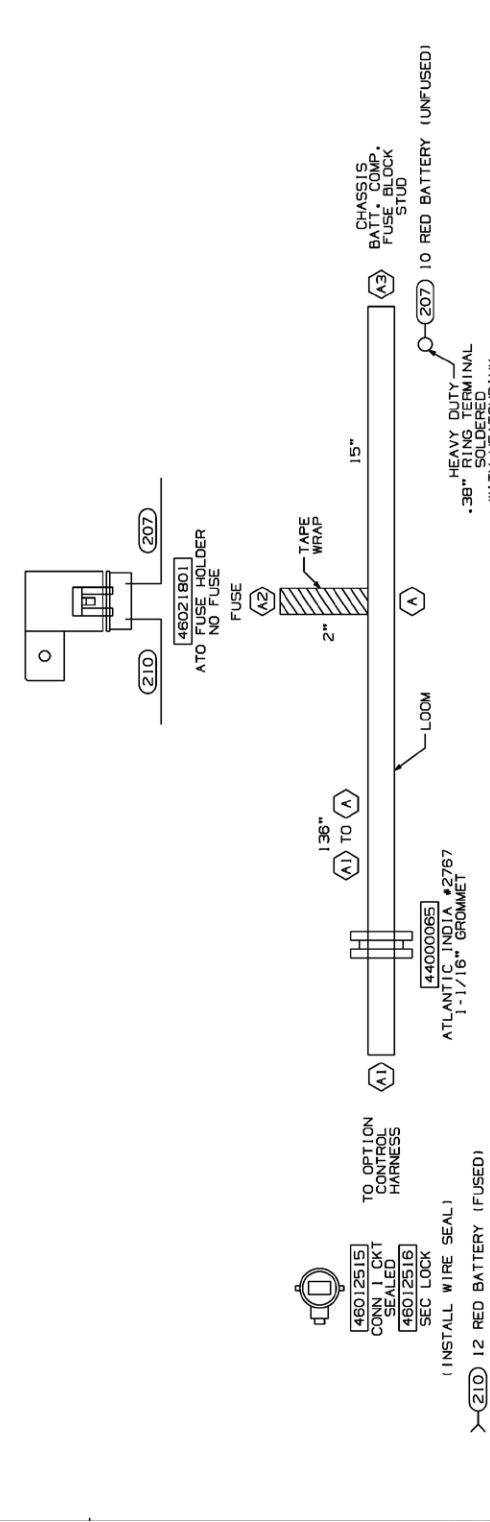
<b>DRAWING NO.</b> 47004506	<b>REV</b> REL	<b>SHT</b> 1 of 1	<b>DESCRIPTION</b> RELEASE TO PRODUCTION																					
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>ITEM</th> <th>QTY</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>2</td> <td>AMP MCP2.8 FLAT TYPE RECEPTACLE</td> </tr> <tr> <td>2</td> <td>1</td> <td>AMP MCP2.8, TE P/N: 1-968851-1</td> </tr> <tr> <td>3</td> <td>2</td> <td>CONNECTOR, 2POS, AMP MCP2.8, TE P/N: 1-1355200-1</td> </tr> <tr> <td>4</td> <td>2</td> <td>SINGLE SEAL, 5.6 mm DIA, TE P/N: 828905-1</td> </tr> <tr> <td>5</td> <td>2</td> <td>STRANDED WIRE, 16 AWG, INSULATED SX/LA/XF OR EQUIVALENT</td> </tr> <tr> <td>6</td> <td>1</td> <td>Terminal, Male, 250 Type (KET ST40254-1) (Yasaki 71142020) Housing, Female, 2 Terminal, 250 Type (KET MG620042) (Yasaki PN 71222128)</td> </tr> </table>				ITEM	QTY	DESCRIPTION	1	2	AMP MCP2.8 FLAT TYPE RECEPTACLE	2	1	AMP MCP2.8, TE P/N: 1-968851-1	3	2	CONNECTOR, 2POS, AMP MCP2.8, TE P/N: 1-1355200-1	4	2	SINGLE SEAL, 5.6 mm DIA, TE P/N: 828905-1	5	2	STRANDED WIRE, 16 AWG, INSULATED SX/LA/XF OR EQUIVALENT	6	1	Terminal, Male, 250 Type (KET ST40254-1) (Yasaki 71142020) Housing, Female, 2 Terminal, 250 Type (KET MG620042) (Yasaki PN 71222128)
ITEM	QTY	DESCRIPTION																						
1	2	AMP MCP2.8 FLAT TYPE RECEPTACLE																						
2	1	AMP MCP2.8, TE P/N: 1-968851-1																						
3	2	CONNECTOR, 2POS, AMP MCP2.8, TE P/N: 1-1355200-1																						
4	2	SINGLE SEAL, 5.6 mm DIA, TE P/N: 828905-1																						
5	2	STRANDED WIRE, 16 AWG, INSULATED SX/LA/XF OR EQUIVALENT																						
6	1	Terminal, Male, 250 Type (KET ST40254-1) (Yasaki 71142020) Housing, Female, 2 Terminal, 250 Type (KET MG620042) (Yasaki PN 71222128)																						
<b>Project</b> 818-0122 OVALS ARE FOR INCOMING INSPECTION CHECKING PROCESSES		<b>Approved by</b> [Signature] 10/22/2013 UNLESS OTHERWISE SPECIFIED TOLERANCES IN INCHES: 1 PLACE DEC = N/A ±0.25; 2 PLACE DEC = ±0.01 ±0.13; 3 PLACE DEC = ±0.005 ±0.08; 4 PLACE DEC = ±0.0025 ±0.0125. ALL DIMENSIONS ARE TO CENTER UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWING! WORK TO GIVEN DIMENSIONS.																						
<b>Designed by</b> [Signature] 06/20/13 OVALS ARE FOR INCOMING INSPECTION CHECKING PROCESSES		<b>Material Specification</b> N/A <b>Finish Specification</b> N/A <b>Title Name</b> Wire Harness, KET to 2.8 MCP, 2 wire, 18" <b>CBL-13452-B-0457</b> <b>Part Number</b> 310-1117 <b>Revision</b> 0 <b>Sheet</b> 1 OF 1																						
<b>Drawn</b> ALL <b>Checked</b> [Signature] 17JUN15 <b>Release No.</b> 45440		<b>Drawn</b> ALL <b>Checked</b> [Signature] 17JUN15 <b>Release No.</b> 45440																						

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**MORGAN OLSON**  
 GENERAL STANDARDS UNLESS OTHERWISE NOTED:  
 1. TOLERANCE: X ± .001, XX ± .000, XXX ± .010  
 2. ANGLES: X DEGREES, XX DEGREES AND DEGREE  
 3. DIMENSIONS: ALL DIMENSIONS UNLESS OTHERWISE NOTED  
 4. FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R.  
 5. ALL DIMENSIONS ARE TO CENTER UNLESS NOTED OTHERWISE.  
 6. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

<b>DRAWING NO.</b> 082091200	<b>REV</b> L of L
<b>DESCRIPTION</b> RELEASE FOR PRODUCTION	<b>DATE</b>

<b>CIRCUIT</b> 207	<b>GAUGE/COLOR</b> 10 RED	<b>END POINTS</b> A2, A3	<b>FUNCTION</b> BATTERY (UNFUSED)
210	12 RED	A1, A2	BATTERY (FUSED)



10. SEALED CONNECTORS AS NOTED TO BE GREASED WITH TRUCK-LITE NYK-77 CORROSION PREVENTATIVE COMPOUND OR EQUIV.
9. THIS IS A PURCHASED HARNESS. NO BILL OF MATERIAL EXISTS.
8. VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONDUIT. ALL DIMENSIONS SHOWN IN TERMINAL VIEW. VENDOR PART NUMBER SHOWN FOR REFERENCE ONLY.
7. HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
6. CONNECTORS SHOWN FROM WIRE ENTRY SIDE UNLESS OTHERWISE NOTED.
5. SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING.
4. TAPE (1111098): 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
3. HARNESS TO HAVE A LABEL PART NUMBER MORGAN OLSON LEVEL, AND DATE OF MANUFACTURE.
2. SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
1. GXL WIRE.

**NOTES:**

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**MORGAN OLSON**  
 GENERAL STANDARDS UNLESS OTHERWISE NOTED:  
 1. TOLERANCE: X ± .001, XX ± .000, XXX ± .010  
 2. ANGLES: X DEGREES, XX DEGREES AND DEGREE  
 3. DIMENSIONS: ALL DIMENSIONS UNLESS OTHERWISE NOTED  
 4. FOR FLAT PATTERNS ALL INSIDE CORNERS MUST BE WITH .188" R.  
 5. ALL DIMENSIONS ARE TO CENTER UNLESS NOTED OTHERWISE.  
 6. FOR FLAT PATTERNS ALL OUTSIDE CORNERS MAY BE ROUNDED UP TO .188" R TO FACILITATE PRODUCTION.

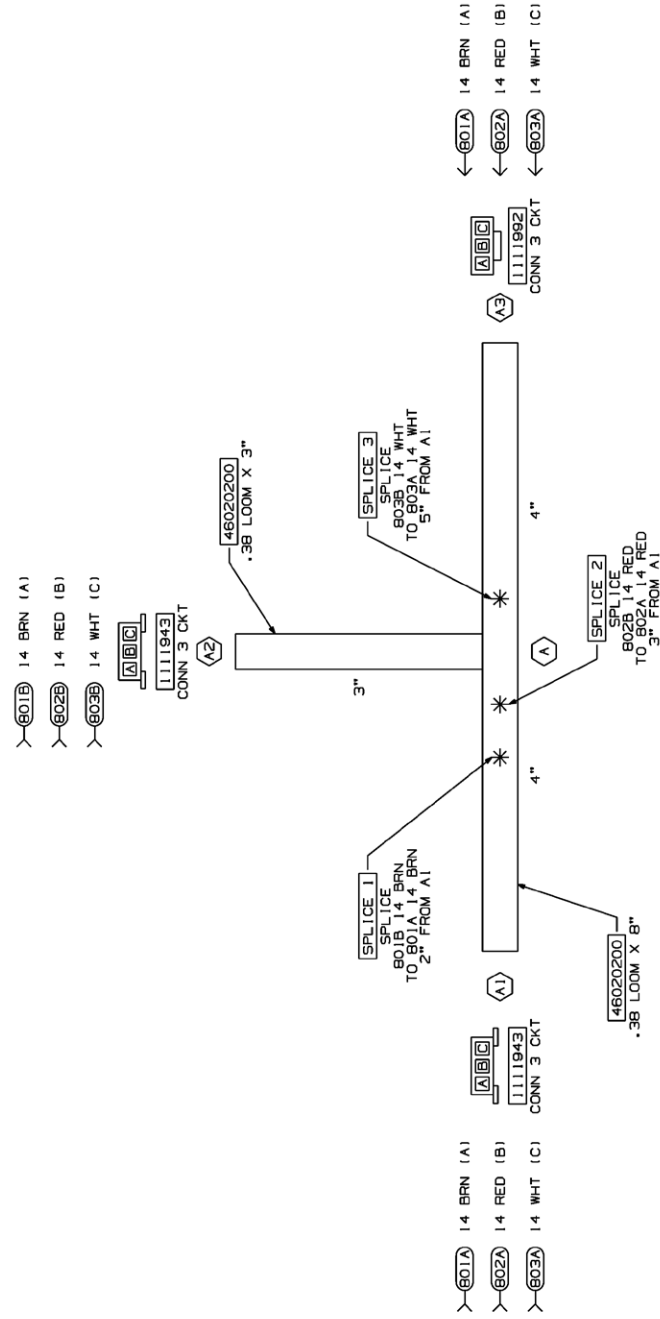
<b>HARNESS AND LOOM TOLERANCES</b>
UP TO 60" = -0/+2"
60" TO 100" = -0/+4"
100" TO 200" = -0/+5"
200" TO 400" = -0/+6"
400" TO 600" = -0/+7"
OVER 600" = -0/+8"
60 TO 80 = -0/+2"

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

BASED ON:  
074093201

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

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
B01A	14 BRN 008 1111944 OE 4601B504	A1, A3	GENERIC
B01B	14 BRN 005 1111944 OE STR .25	A2, SPLICE 1	GENERIC
B02A	14 RED 008 1111944 OE 4601B504	A1, A3	GENERIC
B02B	14 RED 004 1111944 OE STR .25	A2, SPLICE 2	GENERIC
B03A	14 WHT 008 1111944 OE 4601B504	A1, A3	GENERIC
B03B	14 WHT 004 1111944 OE STR .24	A2, SPLICE 3	GENERIC



- 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 ARE ACCEPTABLE FOR GO FABRICATION IF NECESSARY.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING GRUHAM OLSON PART 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:  
1. TOLERANCES: ± 0.5 MM, ± 0.100 INCH  
2. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
3. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
4. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
5. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
6. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
7. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
8. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
9. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
10. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED

**HARNESS AND LOOM TOLERANCES**

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

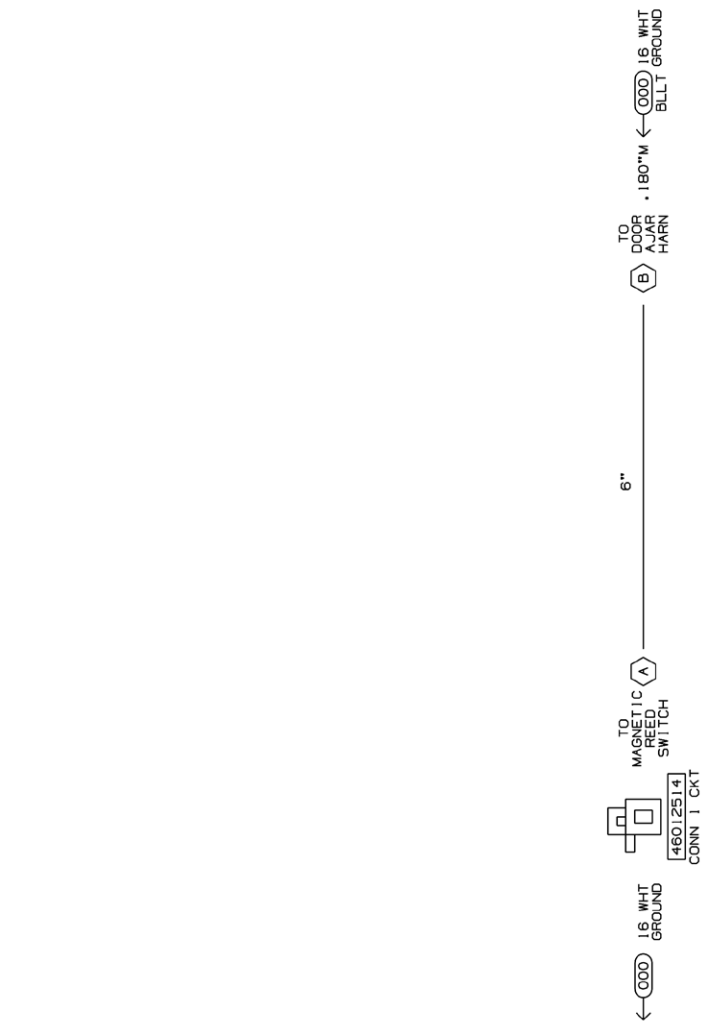
BO TO BO : -0/+2"

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

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

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT 006 4601B100 OE 46019324	A, B	SWITCHED GROUND FOR IND LIGHT

DRAWING NO.	REV	SHT
BB117487		1 of 1
REV	DESCRIPTION	DATE
	RELEASE TO PRODUCTION	



- 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 ARE ACCEPTABLE FOR W-O FABRICATION IF NECESSARY.
- TAPE [1111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

**NOTES:**

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GENERAL STANDARDS UNLESS OTHERWISE NOTED:  
1. TOLERANCES: ± 0.5 MM, ± 0.100 INCH  
2. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
3. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
4. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
5. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
6. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
7. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
8. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
9. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED  
10. DIMENSIONS ARE SHOWN UNLESS OTHERWISE NOTED

**HARNESS AND LOOM TOLERANCES**

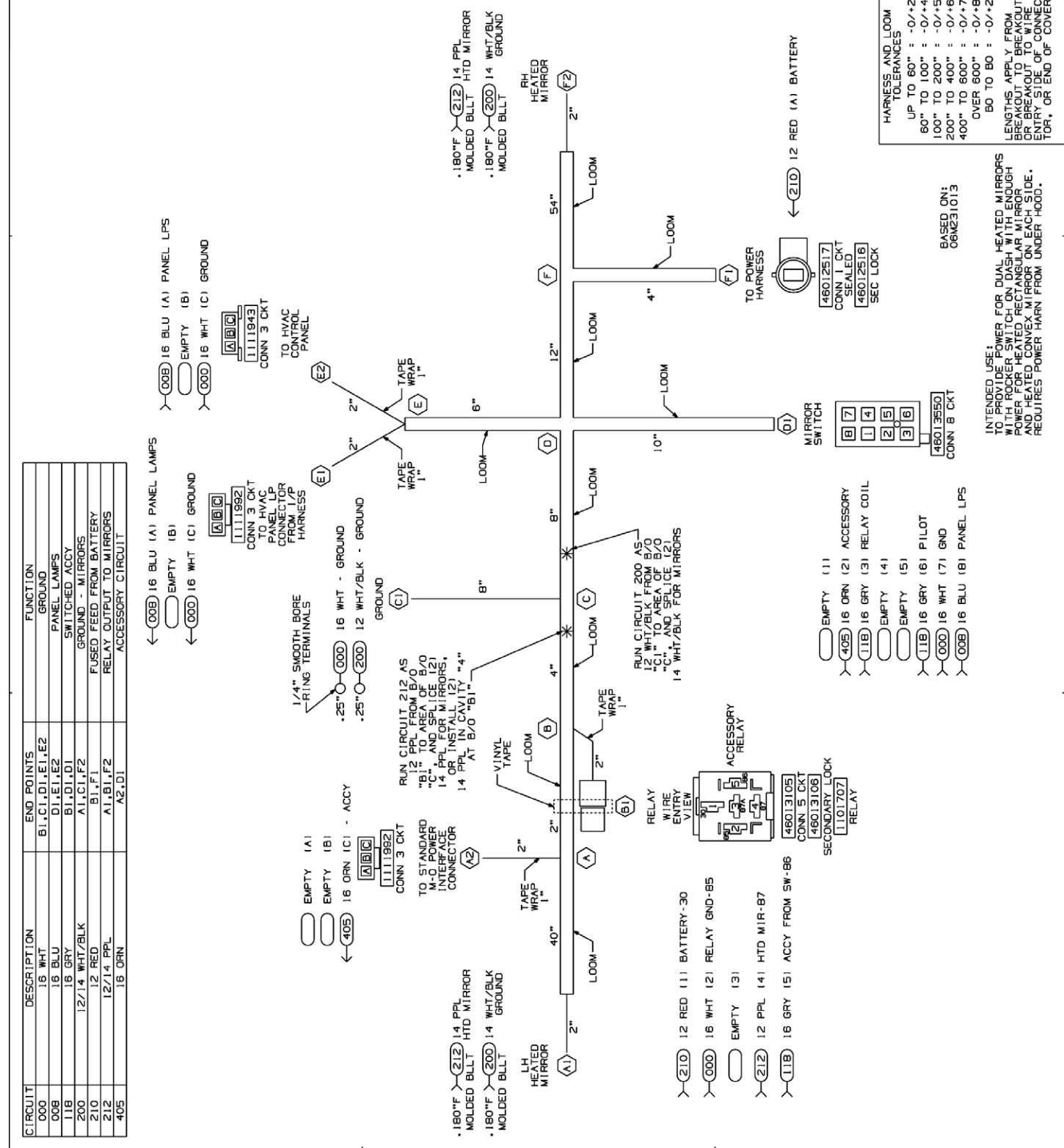
UP TO 60"	: -0/+2"
60" TO 100"	: -0/+4"
100" TO 200"	: -0/+5"
200" TO 400"	: -0/+6"
400" TO 600"	: -0/+7"
OVER 600"	: -0/+8"

BO TO BO : -0/+2"

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

INTENDED USE:  
TO CONVERT A FLEET MAG SW TO PLUG AND PLAY BULLETS OR LOOM.

DRAWING NO.	REV	SHT
090051201		1 of 1
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		



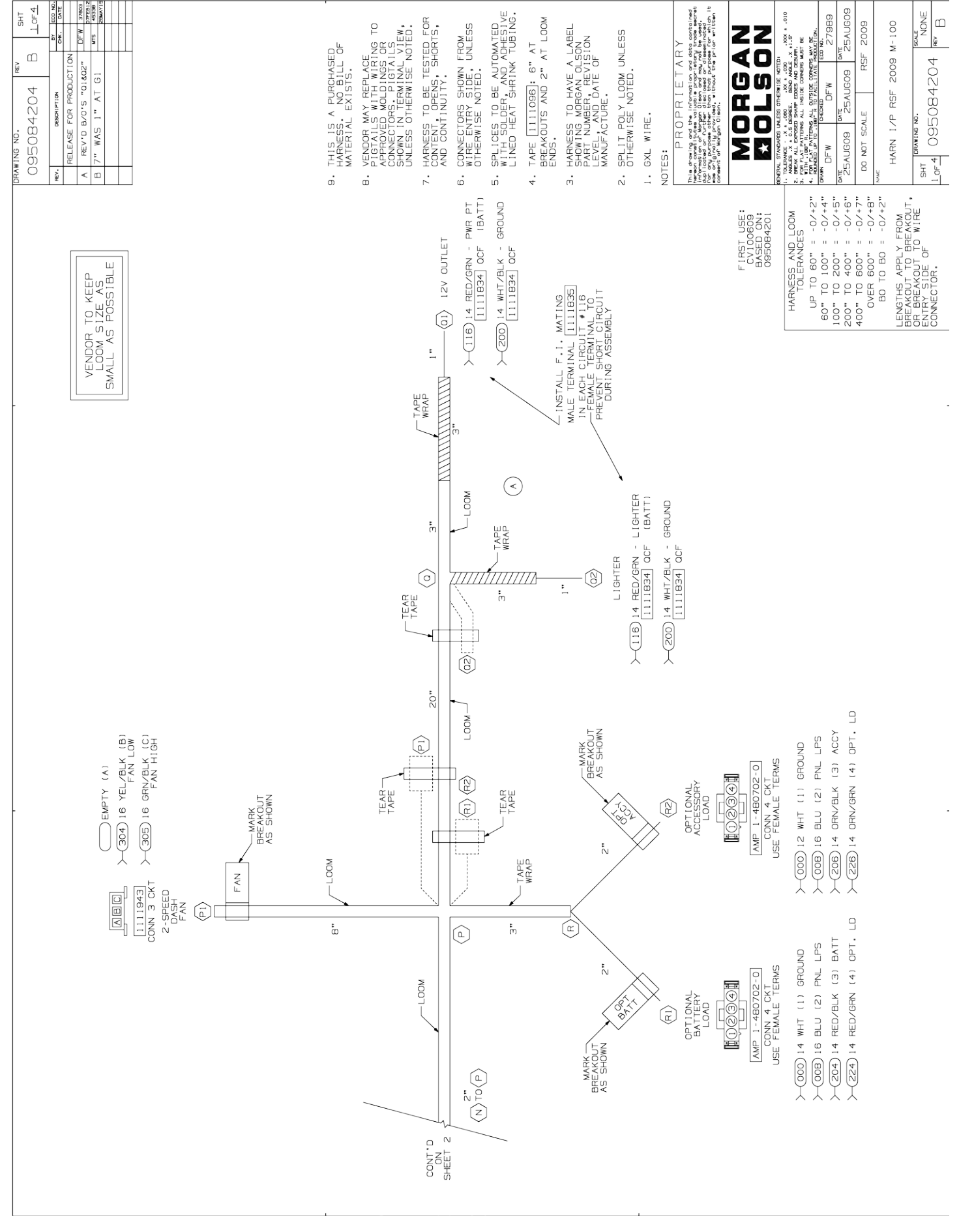
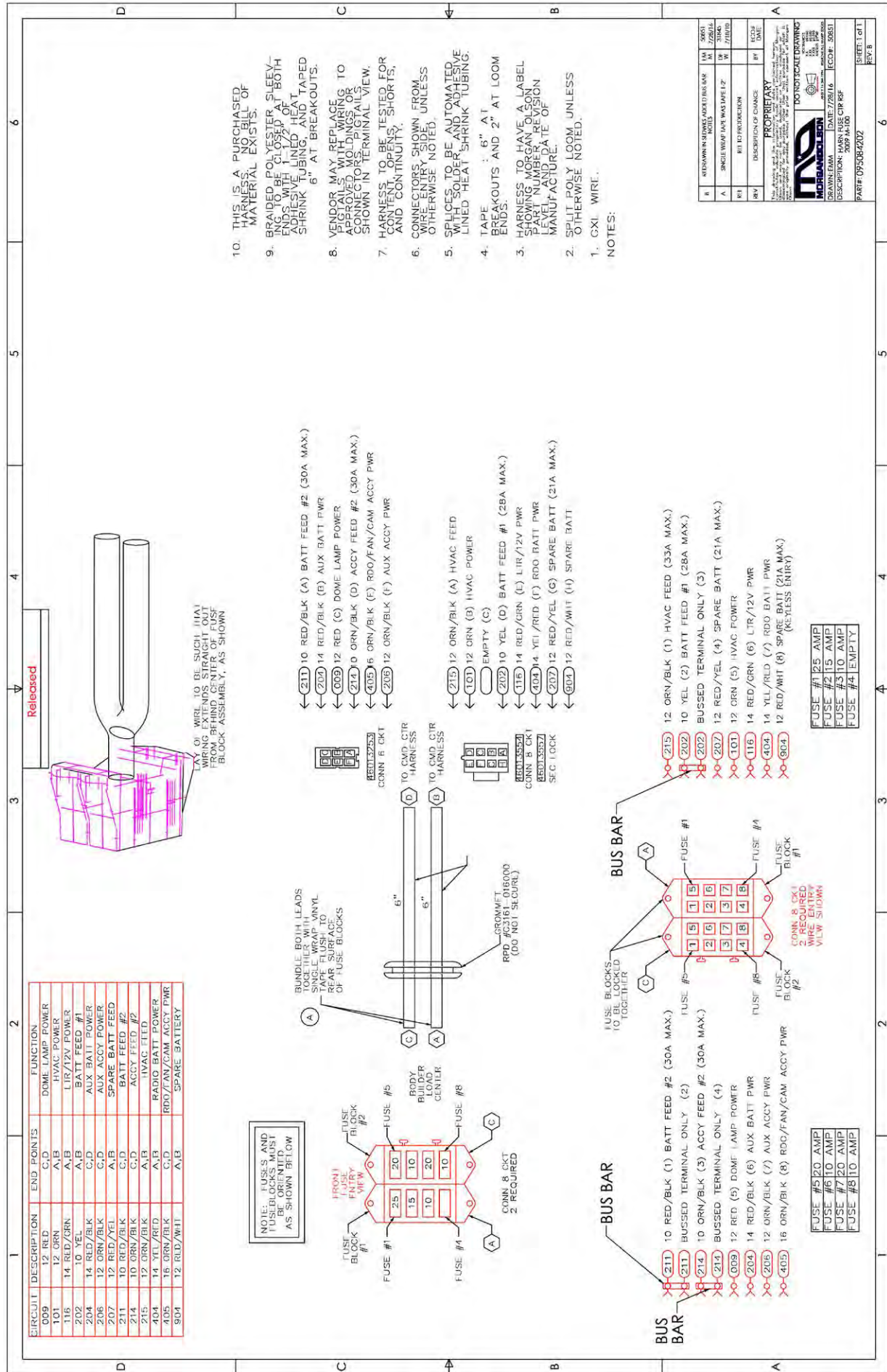
DRAWING NO.	REV	SHT
090091202	A	2 of 2
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		



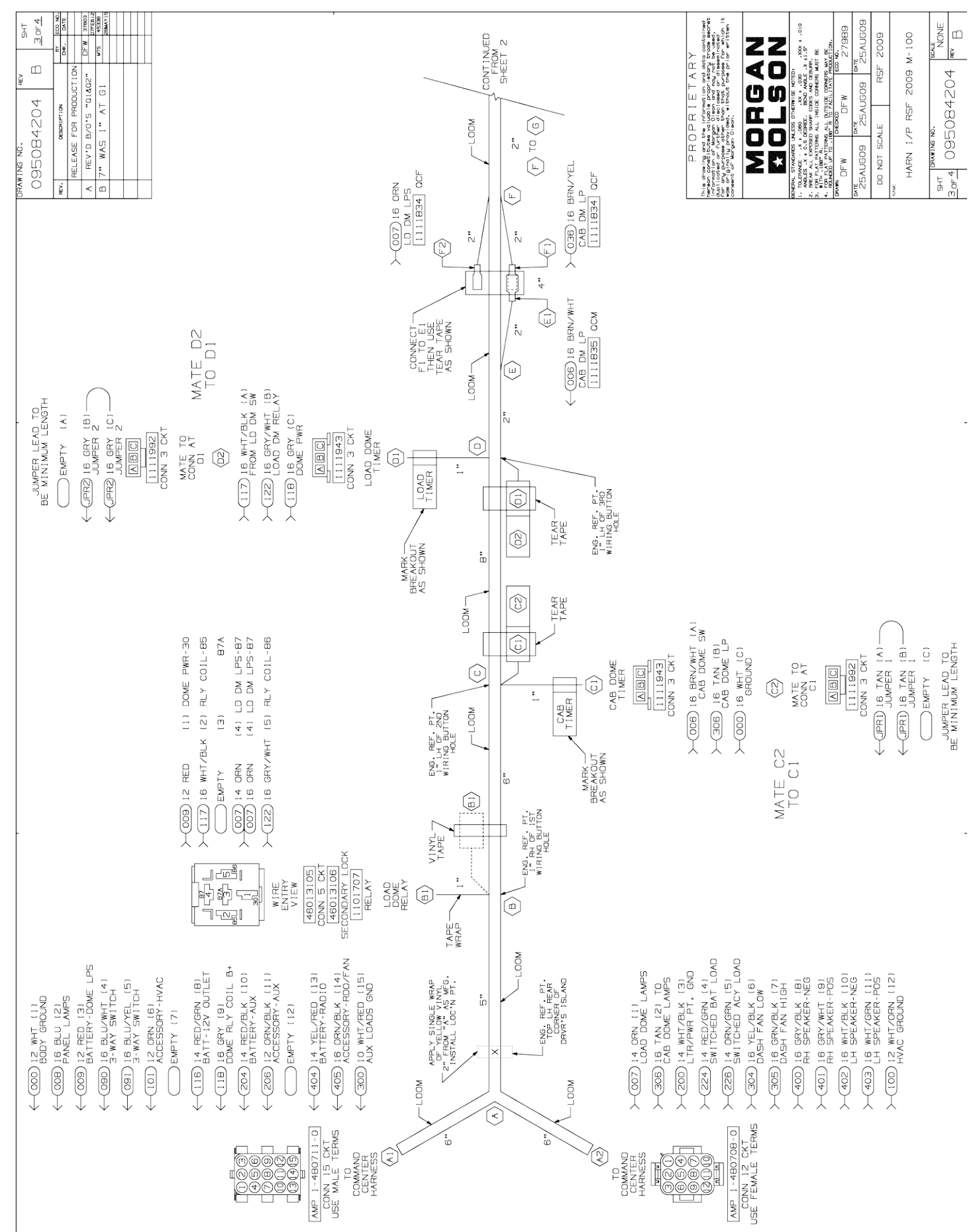
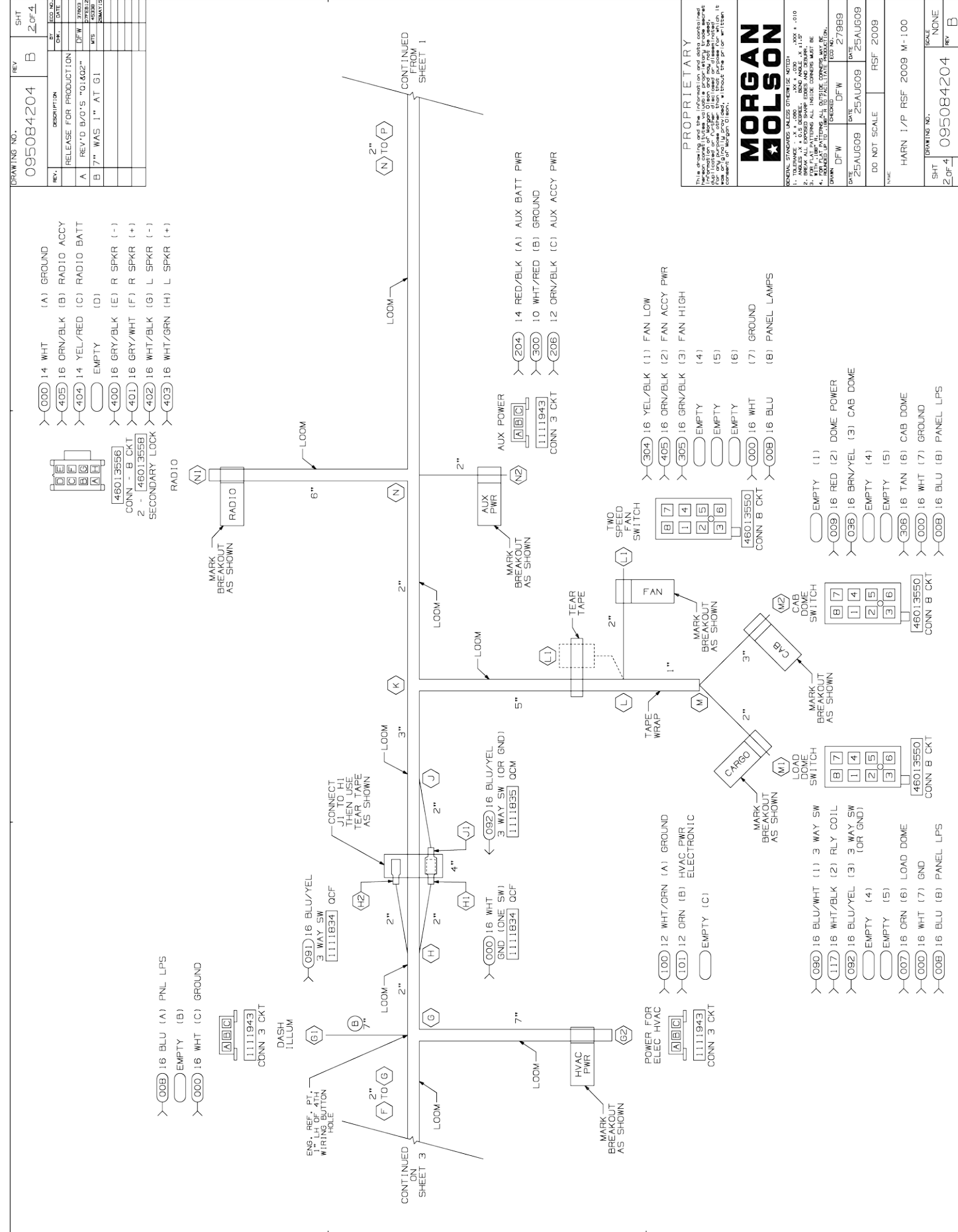
DRAWING NO.	REV	SHT
090091202	A	2 of 2
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		



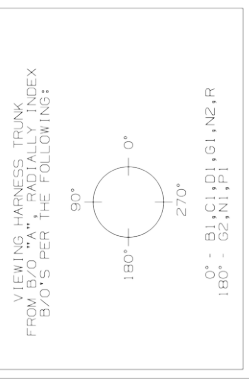








DRAWING NO.	REV	SHT
095084204	B	4 of 4
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		
A REV'D B/O'S "01,02"	DFW	03/10/09
B "7" WAS 1" AT 01	WFS	03/10/09



**PROPRIETARY**

**MORGAN OLSON**

GENERAL STANDARDS UNLESS SPECIFICALLY NOTED:  
 1. DIMENSIONS - IN UNLESS OTHERWISE NOTED.  
 2. TOLERANCES - AS SHOWN.  
 3. SURFACE FINISH - UNLESS OTHERWISE NOTED.  
 4. MATERIALS - UNLESS OTHERWISE NOTED.  
 5. FINISH - UNLESS OTHERWISE NOTED.  
 6. COLOR - UNLESS OTHERWISE NOTED.  
 7. FINISH - UNLESS OTHERWISE NOTED.  
 8. FINISH - UNLESS OTHERWISE NOTED.  
 9. FINISH - UNLESS OTHERWISE NOTED.  
 10. FINISH - UNLESS OTHERWISE NOTED.

DATE: 25AUG09  
 DFW: 27989  
 DO NOT SCALE  
 RSF 2009

HARN. 1/P RSF 2009 M-100

DRAWING NO. 095084204  
 SHT 4 of 4  
 SCALE NONE  
 REV B

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	12/14/16 WHT	A1,C1,G1,H1,L1,M1,W2,N1,R1,R2	GROUND
005	16 BRN/WHT	C1,E1	CAB DOME LAMP (PRE-TIMER)
007	14/16 GRN	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/YEL	A1,G2	LOAD DM 3W SW
100	12 WHT/GRN	A1,G2	HVAC GROUND
101	12 GRN	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	LIGHTER/12V OUTLET GND
204	14 RED/BLK	A1,N2,R1	AUX BATTERY POWER
206	12/14 GRN/BLK	A1,N2,R2	AUX BATTERY POWER
224	14 RED/GRN	A2,R1	SWITCHED BATTERY LOADS
226	14 GRN/GRN	A2,R2	SWITCHED ACCESSORY LOADS
300	10 WHT/RED	A1,N2	AUXILIARY LOADS GND
304	16 YEL/BLK	A2,L1,P1	DASH FAN LOW
305	16 GRN/BLK	A2,L1,P1	DASH FAN HIGH
306	16 TAN	A2,D1,W2	CAB DOME LAMP (POST-TIMER)
400	16 GRN/BLK	A2,N1	RH SPEAKER (-)
401	16 WHT/WHT	A2,N1	RH SPEAKER (+)
402	16 WHT/BLK	A2,N1	LH SPEAKER (-)
403	16 WHT/GRN	A2,N1	LH SPEAKER (+)
404	14 YEL/RED	A1,N1	RADIO BATTERY POWER
405	16 GRN/BLK	A1,L1,N1	ROQ/FAN/CAM ACCY POWER
JPR1	16 TAN	C2,C2	CAB DOME JUMPER
JPR2	16 GRN	D2,D2	LOAD DOME JUMPER

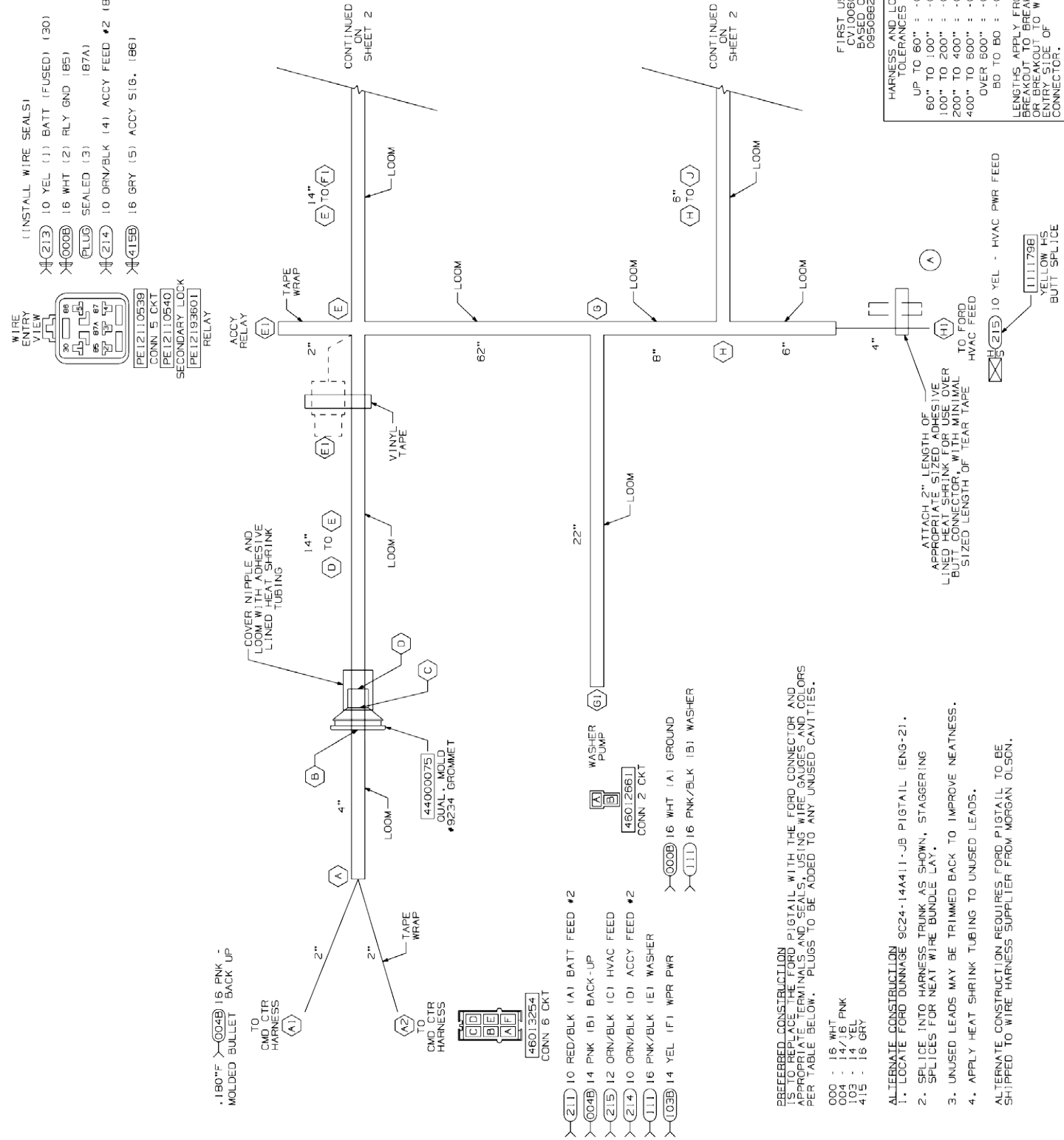
• SEE NOTES

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.

DRAWING NO.	REV	SHT
095088201	A	1 of 2
DESCRIPTION	DATE	
RELEASE FOR PRODUCTION		
A BUTT SPLICE WAS REPAIR KIT CONN.	DFW	03/10/09

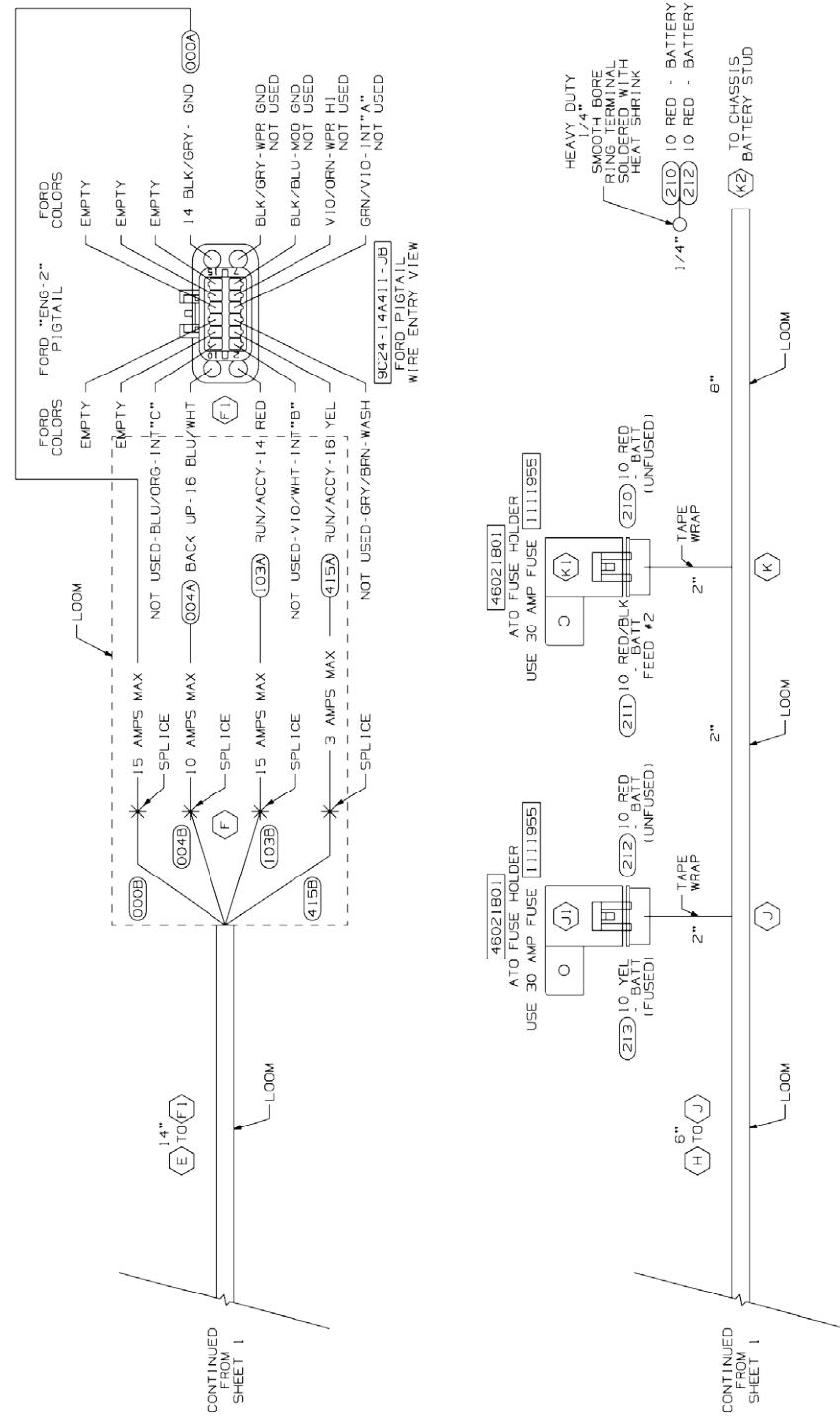
- WIRE ENTRY VIEW
- INSTALL WIRE SEALS!
  - (213) 10 YEL (1) BATT (FUSED) (30)
  - (000B) 16 WHT (2) RLY GND (B5)
  - (215) 10 GRN/BLK (1) ACCY FEED #2 (B7)
  - (15B) 16 GRN (5) ACCY SIG. (B6)
- CONN 5 CKT  
 PEL2110539  
 PEL2110540  
 SECONDARY LOCK  
 PEL2193601



FIRST USE:  
 CV100609  
 BASED ON:  
 095088200

HARNES AND LOOM TOLERANCES  
 UP TO 60" : -0/-2"

DRAWING NO.	095088201	REV	A	SHT	2 OF 2
DESCRIPTION	RELEASE FOR PRODUCTION				
DATE					
BY					
CHECKED					
DATE					
BY					
CHECKED					
DATE					



THIS HARNESS IS FOR WIPERS, BACK-UP, HVAC ACCESSORY POWER FEED, AUX. BATTERY FEED, AND AUX. ACCESSORY FEED. IT WILL BE INSTALLED BETWEEN THE FORD WIPERS CONNECTOR AND THE BODY CONTROL CENTER. THE WIPER/WASHER RESERVOIR AND 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 (UNUSED)
211	10 RED/BLK	A2,K1	BATT FEED #2
212	10 RED	J1,K2	BATTERY (UNUSED)
213	10 YEL	E1,J1	BATTERY (UNUSED)
214	10 DRN/BLK	A2,E1	ACCY FEED #2
215	12 DRN/BLK	A2,H1	HVAC FEED
415A	16 YEL	F,F1	ACCY SIGNAL
415B	16 GRY	E1,F	ACCY SIGNAL

• SEE NOTES

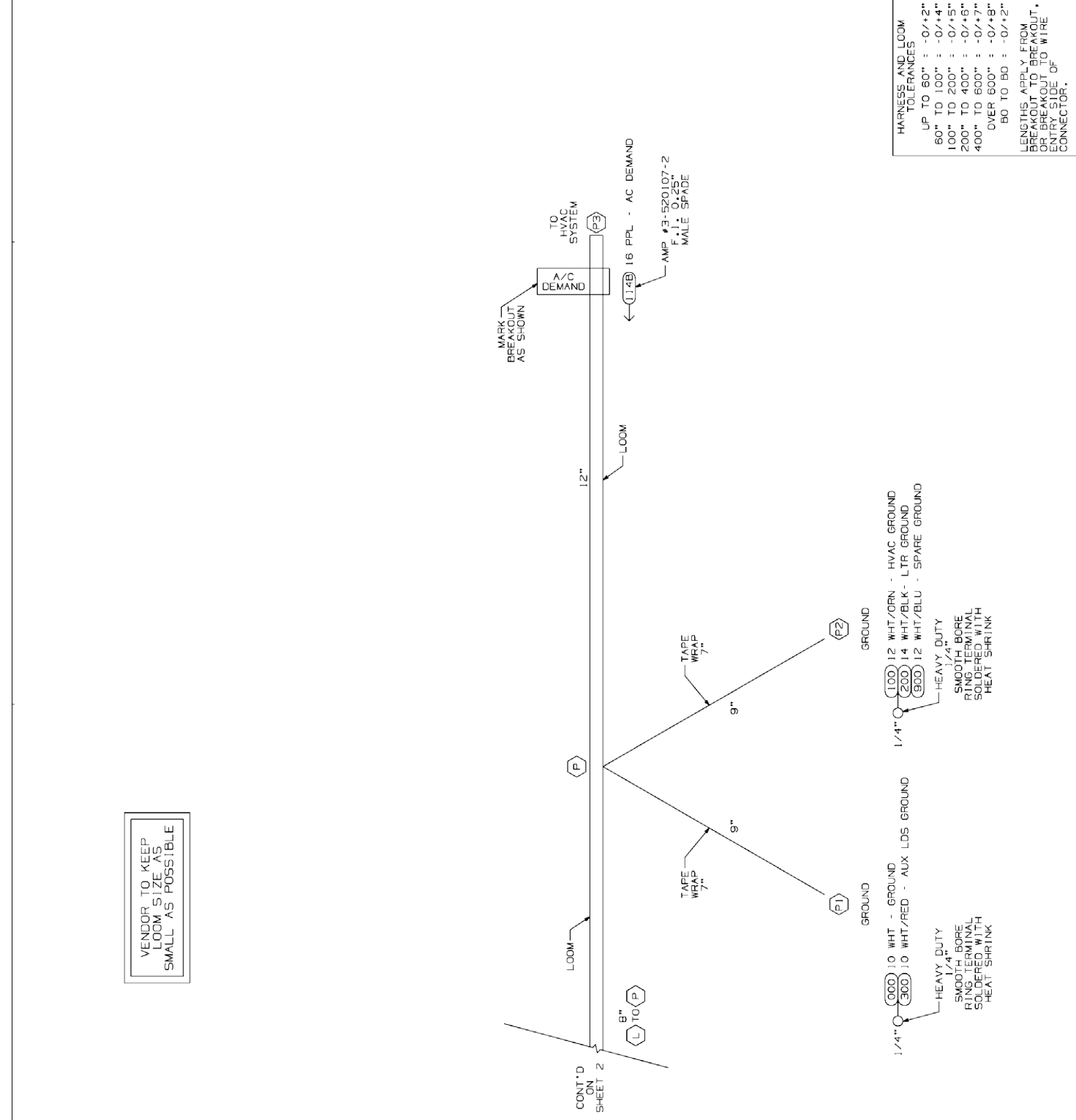
<b>PROPRIETARY</b>					
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<b>MORGAN OLSON</b>					
MORGAN OLSON, INC. 10000 W. 10TH AVENUE, SUITE 100, DENVER, CO 80231					
1. TOLERANCE	±.000	±.005	±.010	±.015	±.020
2. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
3. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
4. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
5. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
6. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
DATE	19AUG09	DATE	19AUG09	DATE	19AUG09
DO NOT SCALE	2009 RSF	DO NOT SCALE	2009 RSF	DO NOT SCALE	2009 RSF
NAME	HARN_WPR/ENG_RS_F	NAME	HARN_WPR/ENG_RS_F	NAME	HARN_WPR/ENG_RS_F
DRAWING NO.	095088201	DRAWING NO.	095088201	DRAWING NO.	095088201
SHT	2 OF 2	SHT	2 OF 2	SHT	2 OF 2
SCALE	NONE	SCALE	NONE	SCALE	NONE
REV	A	REV	A	REV	A

DRAWING NO.	115084206	REV	1 OF 5
DESCRIPTION	RELEASE FOR PRODUCTION		
DATE			
BY			
CHECKED			
DATE			

VENDOR TO KEEP LOOM SIZE AS SMALL AS POSSIBLE

- THIS IS A PURCHASED HARNESS. NO BELL OF MATERIAL EXISTS.
- VENDOR MAY REPLACE PIGTAILS WITH WIRING TO CONNECT TO OTHER COMPONENTS. PIGTAILS SHOWN IN TERMINAL VIEW, UNLESS OTHERWISE NOTED.
- HARNESS TO BE TESTED FOR CONTENT OPEN, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM OTHER VIEWS, 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 LEVEL AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
- GXL WIRE.

<b>PROPRIETARY</b>					
THIS DRAWING IS THE PROPERTY OF MORGAN OLSON. IT IS NOT TO 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.					
<b>MORGAN OLSON</b>					
MORGAN OLSON, INC. 10000 W. 10TH AVENUE, SUITE 100, DENVER, CO 80231					
1. TOLERANCE	±.000	±.005	±.010	±.015	±.020
2. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
3. DIMENSIONS	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
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DATE	14JUN11	DATE	14JUN11	DATE	14JUN11
DO NOT SCALE	RSF 2011	DO NOT SCALE	RSF 2011	DO NOT SCALE	RSF 2011
NAME	HARN_COM_CTR_RS_F	NAME	HARN_COM_CTR_RS_F	NAME	HARN_COM_CTR_RS_F
DRAWING NO.	115084206	DRAWING NO.	115084206	DRAWING NO.	115084206
SHT	1 OF 5	SHT	1 OF 5	SHT	1 OF 5
SCALE	NONE	SCALE	NONE	SCALE	NONE
REV	A	REV	A	REV	A

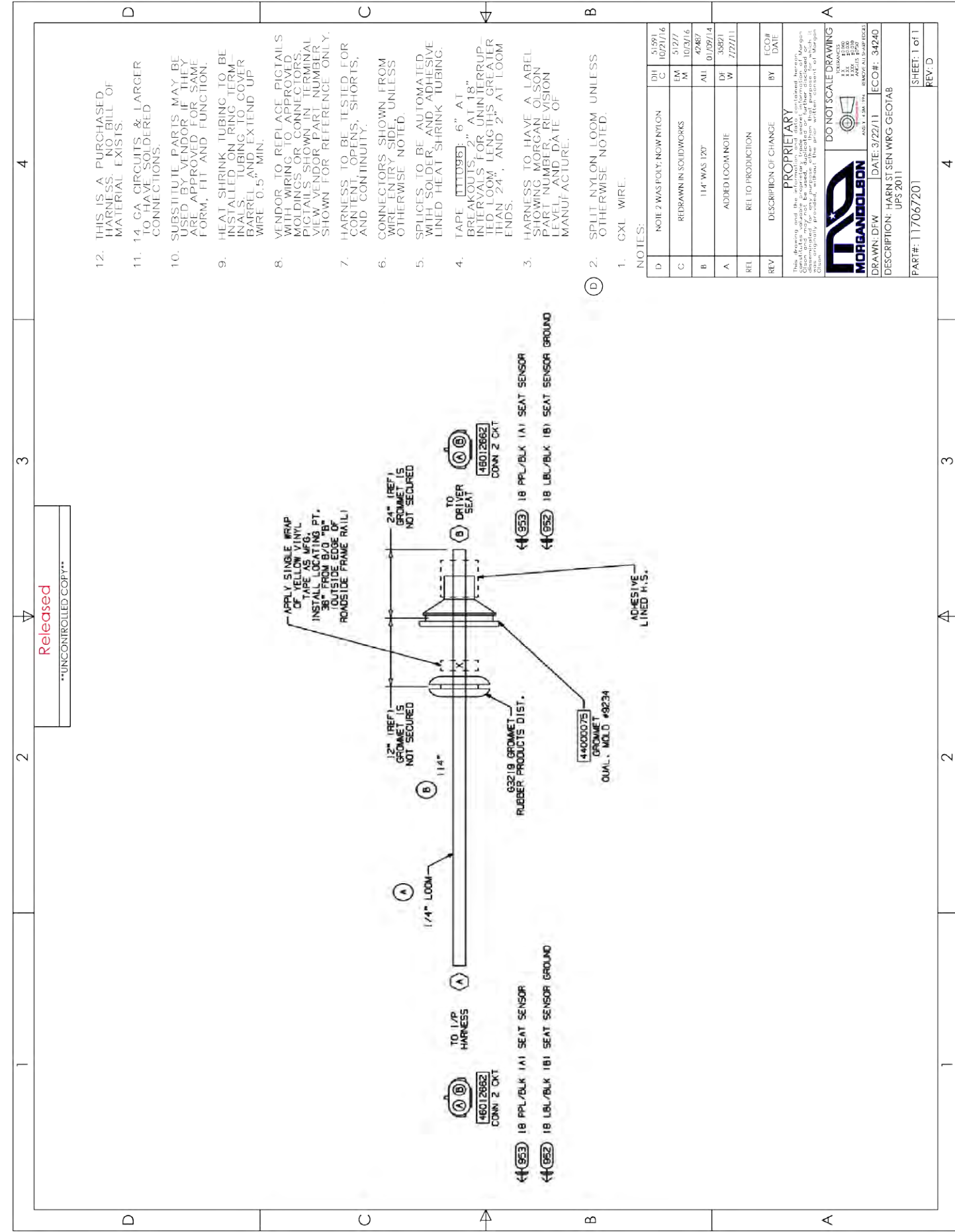


HARNESS AND LOOM TOLERANCES
UP TO 60" : -0/+2"
60" TO 100" : -0/+4"
100" TO 200" : -0/+5"
200" TO 400" : -0/+6"
400" TO 600" : -0/+7"
OVER 600" : -0/+8"
80 TO 80 : -0/+2"

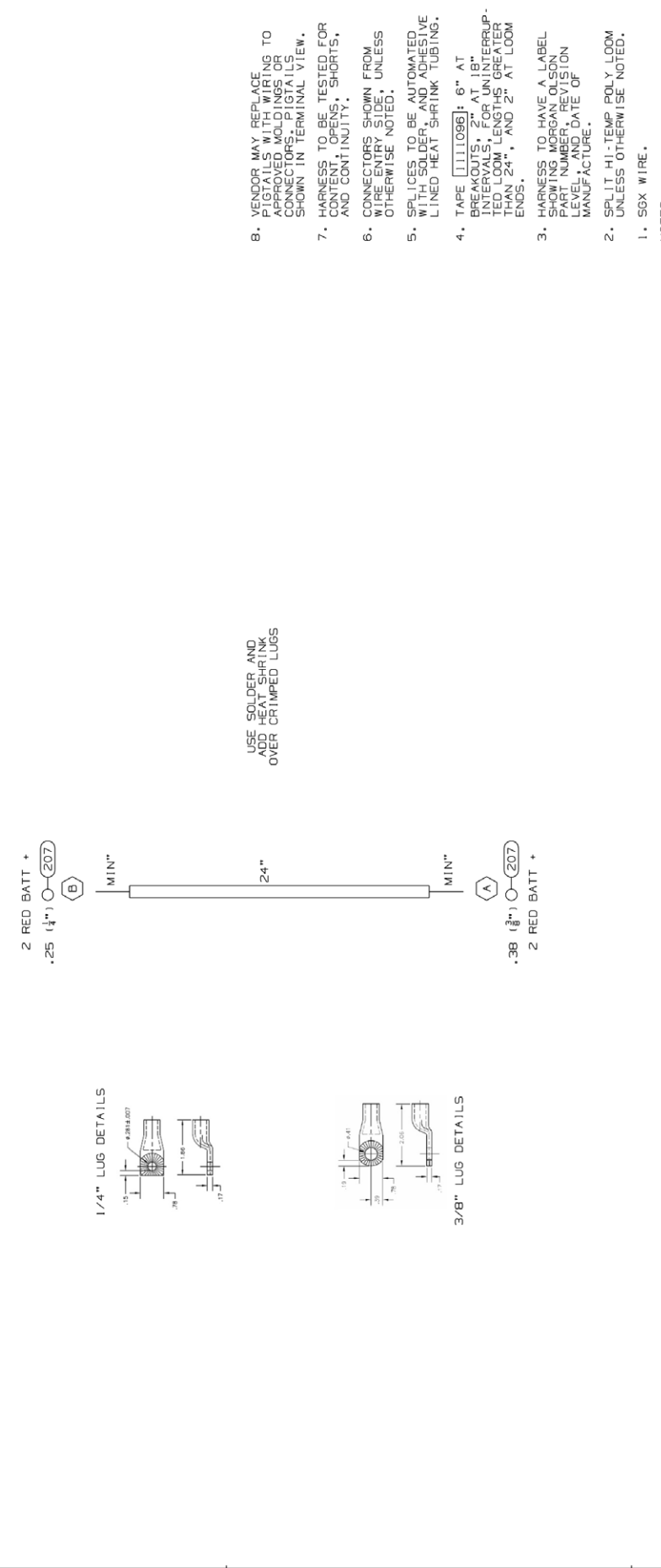
LENGTHS APPLY FROM BREAKOUT TO BREAKOUT OR BREAKOUT TO WIRE ENTRY SIDE OF CONNECTOR.







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



- VENDOR MAY REPLACE PIGTAILS WITH WIRING TOOLS. MORGAN OLSON CONNECTORS PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTACT OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM REVERSE VIEW UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING.
- TAPE [|||||096]: 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 NUMBER, AND DATE OF MANUFACTURE.
- SPLIT HI-TEMP POLY LOOM UNLESS OTHERWISE NOTED.
- SGX WIRE.

**PROPRIETARY**

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**MORGAN OLSON**

GENERAL STANDARDS UNLESS OTHERWISE NOTED

- WIRING: #12 AWG, 100% COPPER, UNINSULATED
- WIRING: #14 AWG, 100% COPPER, UNINSULATED
- WIRING: #16 AWG, 100% COPPER, UNINSULATED
- WIRING: #18 AWG, 100% COPPER, UNINSULATED
- WIRING: #20 AWG, 100% COPPER, UNINSULATED
- WIRING: #22 AWG, 100% COPPER, UNINSULATED
- WIRING: #24 AWG, 100% COPPER, UNINSULATED
- WIRING: #26 AWG, 100% COPPER, UNINSULATED
- WIRING: #28 AWG, 100% COPPER, UNINSULATED
- WIRING: #30 AWG, 100% COPPER, UNINSULATED
- WIRING: #32 AWG, 100% COPPER, UNINSULATED
- WIRING: #34 AWG, 100% COPPER, UNINSULATED
- WIRING: #36 AWG, 100% COPPER, UNINSULATED
- WIRING: #38 AWG, 100% COPPER, UNINSULATED
- WIRING: #40 AWG, 100% COPPER, UNINSULATED
- WIRING: #42 AWG, 100% COPPER, UNINSULATED
- WIRING: #44 AWG, 100% COPPER, UNINSULATED
- WIRING: #46 AWG, 100% COPPER, UNINSULATED
- WIRING: #48 AWG, 100% COPPER, UNINSULATED
- WIRING: #50 AWG, 100% COPPER, UNINSULATED
- WIRING: #52 AWG, 100% COPPER, UNINSULATED
- WIRING: #54 AWG, 100% COPPER, UNINSULATED
- WIRING: #56 AWG, 100% COPPER, UNINSULATED
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- WIRING: #62 AWG, 100% COPPER, UNINSULATED
- WIRING: #64 AWG, 100% COPPER, UNINSULATED
- WIRING: #66 AWG, 100% COPPER, UNINSULATED
- WIRING: #68 AWG, 100% COPPER, UNINSULATED
- WIRING: #70 AWG, 100% COPPER, UNINSULATED
- WIRING: #72 AWG, 100% COPPER, UNINSULATED
- WIRING: #74 AWG, 100% COPPER, UNINSULATED
- WIRING: #76 AWG, 100% COPPER, UNINSULATED
- WIRING: #78 AWG, 100% COPPER, UNINSULATED
- WIRING: #80 AWG, 100% COPPER, UNINSULATED
- WIRING: #82 AWG, 100% COPPER, UNINSULATED
- WIRING: #84 AWG, 100% COPPER, UNINSULATED
- WIRING: #86 AWG, 100% COPPER, UNINSULATED
- WIRING: #88 AWG, 100% COPPER, UNINSULATED
- WIRING: #90 AWG, 100% COPPER, UNINSULATED
- WIRING: #92 AWG, 100% COPPER, UNINSULATED
- WIRING: #94 AWG, 100% COPPER, UNINSULATED
- WIRING: #96 AWG, 100% COPPER, UNINSULATED
- WIRING: #98 AWG, 100% COPPER, UNINSULATED
- WIRING: #100 AWG, 100% COPPER, UNINSULATED

HARN BAT POS 26A BREAKER 24"

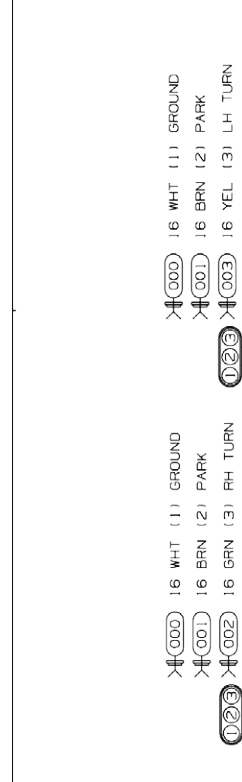
SHEET: 1 of 1

DRAWING NO.: 132088206

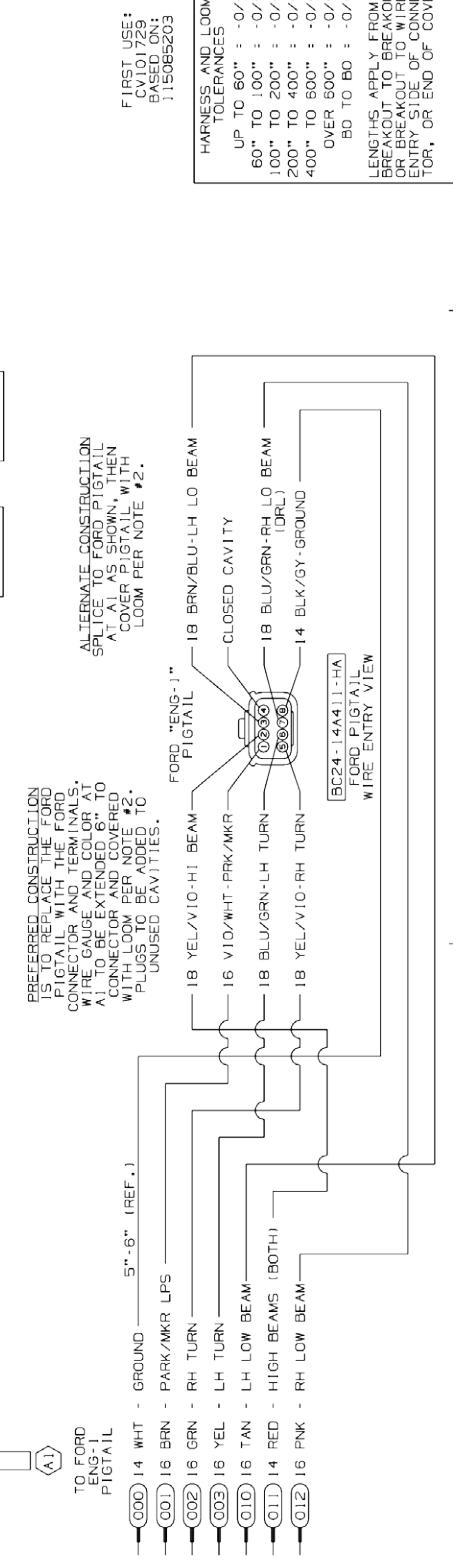
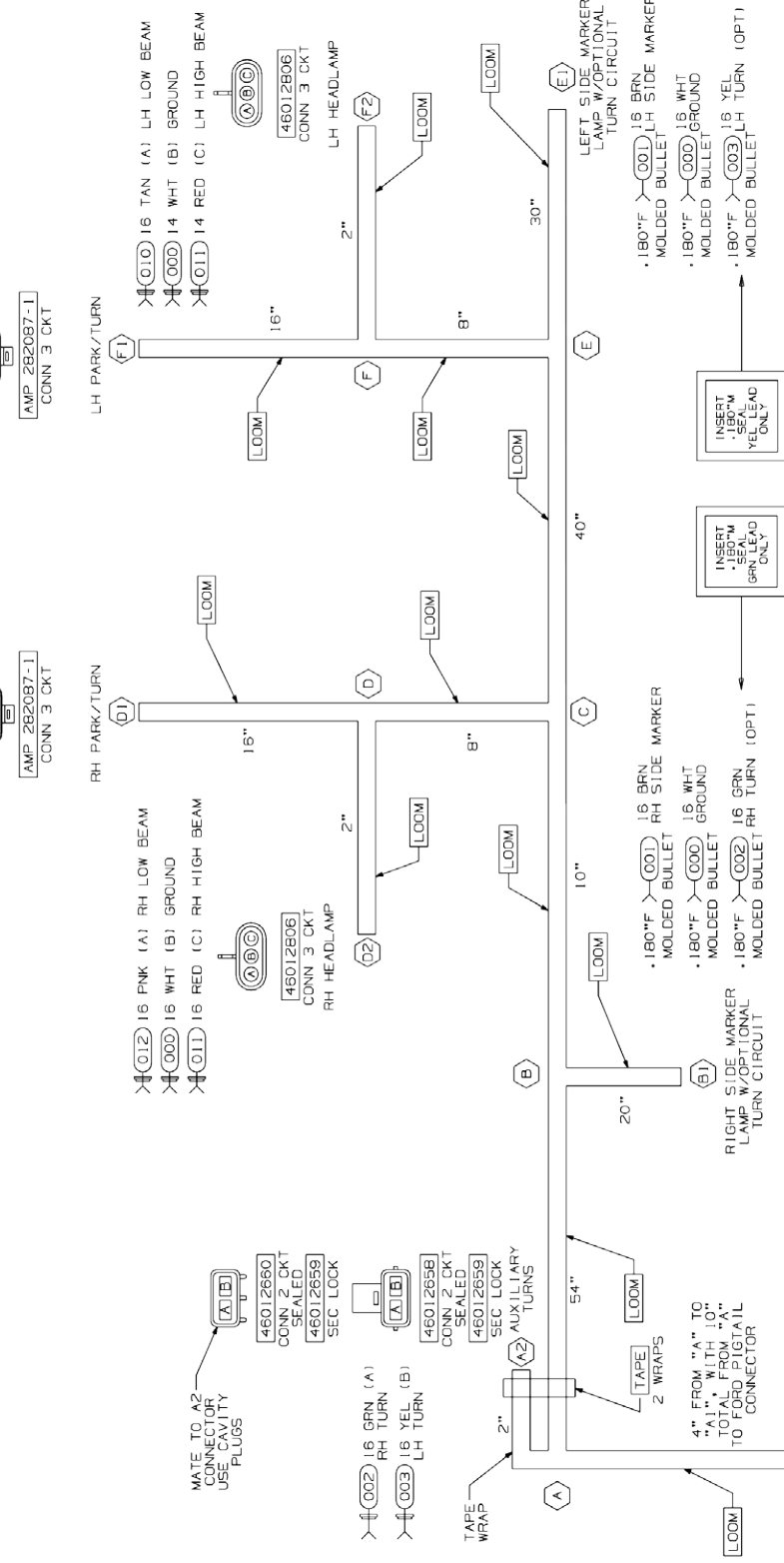
SCALE: NONE

REV: D

DRAWING NO.	REV	SHT
135085204	-	1 OF 1
DESCRIPTION	BY	DATE
RELEASE FOR PRODUCTION		



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



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**MORGAN OLSON**

GENERAL STANDARDS UNLESS OTHERWISE NOTED:

1. TOLERANCES: ±.000

2. DIMENSIONS: AS SHOWN

3. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED

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DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DESCRIPTION	FUNCTION
16 BLK	SW GROUND
16 RED	BATTERY
16 TAN	STEPWELL LP
16 BLK	GROUND

DRAWING NO.	REV	SHT
1400BB200		1 of 1
DESCRIPTION	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 APPROVED MOLDING WITH UNAPPROVED MOLDING CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW.
- HARNESS TO BE TESTED FOR CONTENTS, OPENS, SHORTS, AND CONTINUITY.
- CONNECTORS SHOWN FROM THE ENTRY SIDE, UNLESS OTHERWISE NOTED.
- SPLICES TO BE AUTOMATED WITH HEAT SHRINK TUBING. USE APPROVED BUT NOT LISTED FABRICATOR IF NECESSARY.
- TAPE [1111096]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

NOTES:

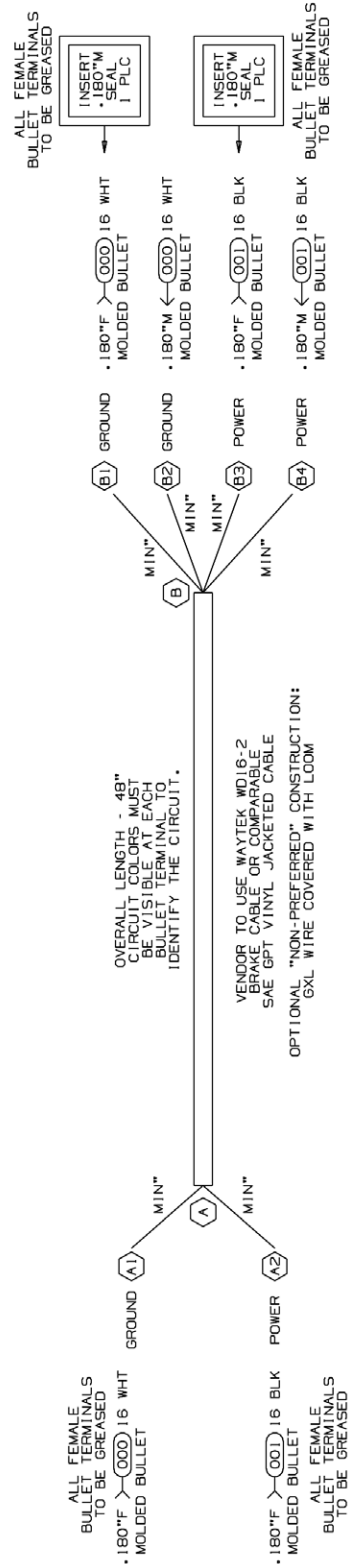
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<b>MORGAN OLSON</b>	
GENERAL STANDARDS UNLESS OTHERWISE NOTED:	
1. MATERIALS: U.S.A. UNLESS OTHERWISE NOTED	DATE: 17DEC13
2. WIRE: ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	TIME: 42:40
3. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	DO NOT SCALE
4. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	SCALE: NONE
5. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	REV: 1
DRAWING NO. 1400BB200	
SHT 1 of 1	

HARNESS AND LOOM TOLERANCES	
UP TO 60"	= 0/+2"
60" TO 100"	= 0/+1"
100" TO 200"	= 0/+1"
200" TO 400"	= 0/+1"
400" TO 600"	= 0/+1"
OVER 600"	= 0/+2"
BO TO 90"	= 0/+2"

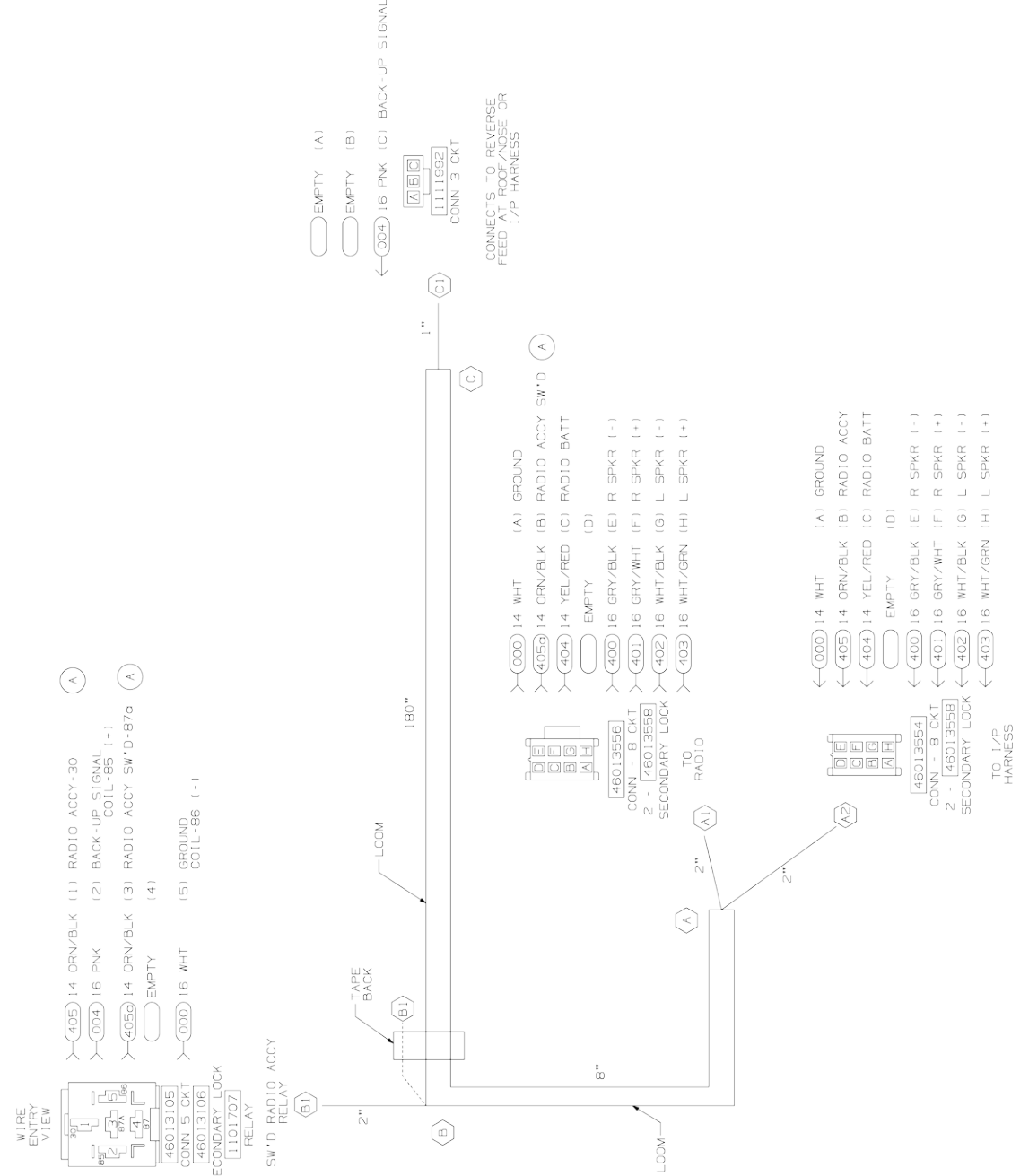
TO TOLERANCE IS NOT ACCUMULATIVE. LENGTH TOLERANCE SHALL BE APPLIED TO HARNESS LENGTH BREAKOUT TO END, OR LOOM.

FIRST USE: CURSIVE LETTER MARKER



DRAWING NO.	REV	SHT
155084203	A	1 of 1
DESCRIPTION	DATE	
RELEASE FOR 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/BLK	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



<b>MORGAN OLSON</b>	
GENERAL STANDARDS UNLESS OTHERWISE NOTED:	
1. MATERIALS: U.S.A. UNLESS OTHERWISE NOTED	DATE: 09SEP15
2. WIRE: ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	TIME: 09SEP15
3. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	DO NOT SCALE
4. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	SCALE: NONE
5. ALL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE SAE STANDARD WIRING PRACTICES AND SHALL BE IDENTIFIED BY COLOR AND NUMBER.	REV: 1
DRAWING NO. 155084203	
SHT 1 of 1	



DRAWING NO.	REV	SHT
15738B200	LOPJ	1
DESCRIPTION	DATE	
RELEASE TO PRODUCTION		

- 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 ARE ACCEPTABLE FOR M.O. FABRICATION IF NECESSARY.
- TAPE [111098]: 6" AT BREAKOUTS AND 2" AT LOOM ENDS.
- HARNESS TO HAVE A LABEL BY NUMBER, MORGAN OLSON LEVEL, AND DATE OF MANUFACTURE.
- SPLIT POLY LOOM UNLESS JACKETED CABLE IS USED.
- JACKETED CABLE AS NOTED.

NOTES:

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**MORGAN OLSON**

GENERAL STANDARDS UNLESS OTHERWISE NOTED:

- WIRING: 1. 18 AWG, 30 VOLT, 100% COPPER, 100% TENSILE STRENGTH, 100% OXIDATION RESISTANT, 100% UL LISTED.
- WIRING: 2. 18 AWG, 30 VOLT, 100% COPPER, 100% TENSILE STRENGTH, 100% OXIDATION RESISTANT, 100% UL LISTED.
- WIRING: 3. 18 AWG, 30 VOLT, 100% COPPER, 100% TENSILE STRENGTH, 100% OXIDATION RESISTANT, 100% UL LISTED.
- WIRING: 4. 18 AWG, 30 VOLT, 100% COPPER, 100% TENSILE STRENGTH, 100% OXIDATION RESISTANT, 100% UL LISTED.

ALL	DATE	REV
21OCT15		4B230
DO NOT SCALE		21OCT15

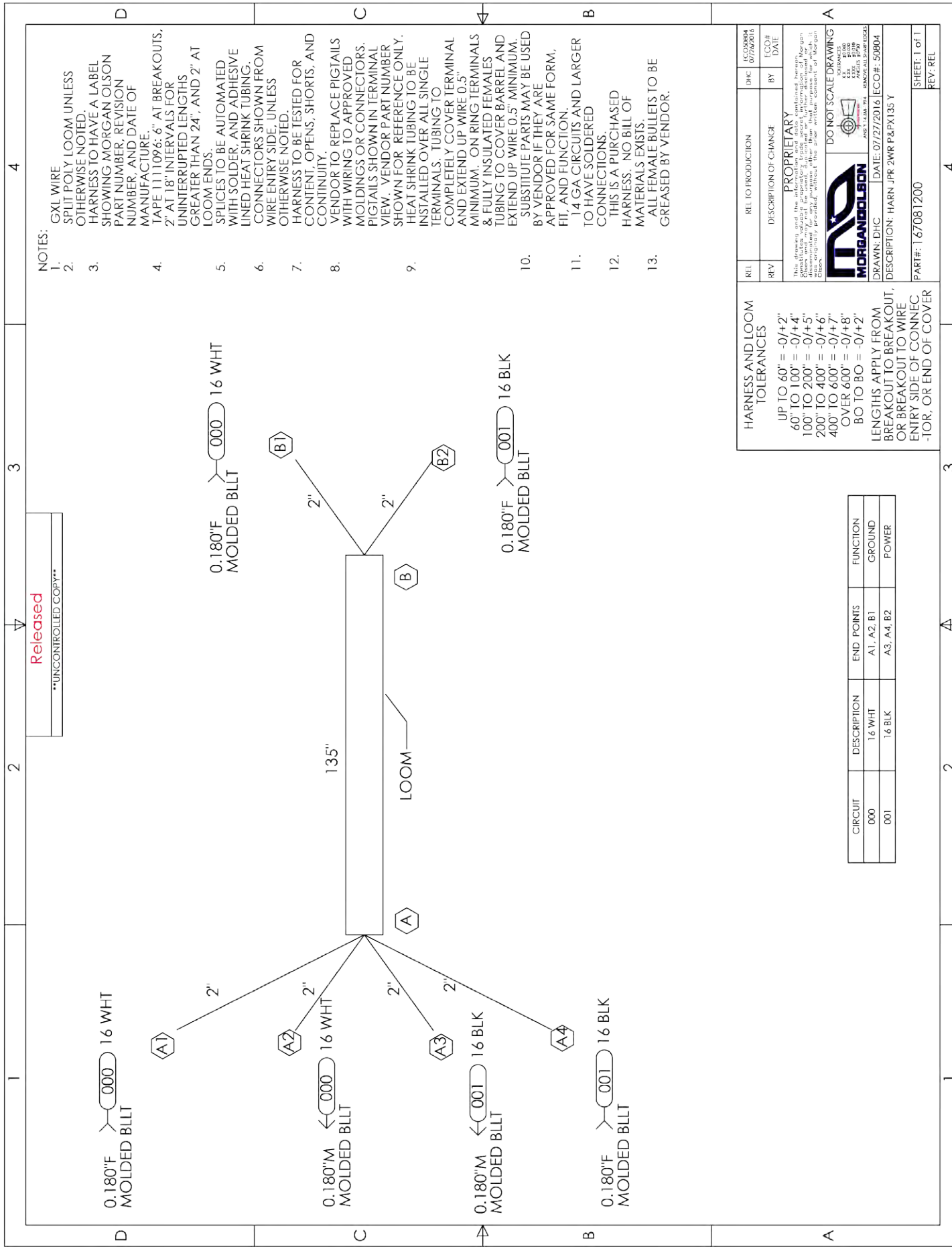
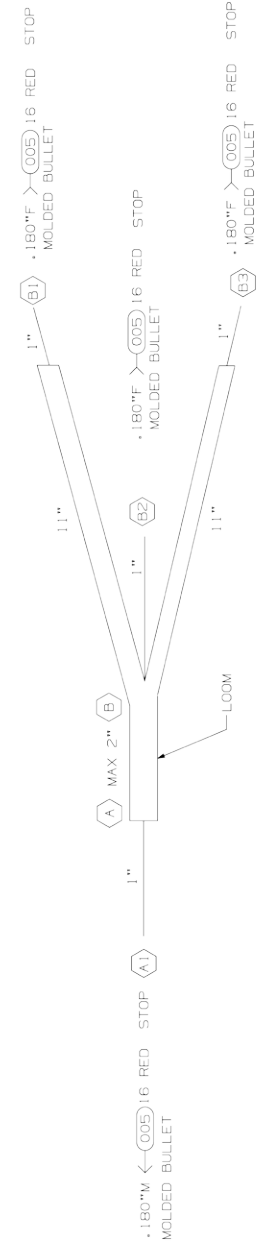
HARNESS: JUMPER SPCL CHMSL  
SCALE: NONE  
DRAWING NO.: 15738B200  
REV: 1

HARNESS AND LOOM TOLERANCES:

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

BO TO BO = ± 0/+2"

TOLERANCE IS NOT APPLICABLE TO LENGTHS APPROXIMATE TO BREAKOUT TO END, OR LOOM.



Released  
\*\*UNCONTROLLED COPY\*\*

- NOTES:
- GXL WIRE SPLIT POLY LOOM UNLESS OTHERWISE NOTED.
  - HARNESS TO HAVE A LABEL SHOWING MORGAN OLSON PART NUMBER, REVISION NUMBER, AND DATE OF MANUFACTURE.
  - TAPE 111098: 6" AT BREAKOUTS, 2" AT 18" INTERVALS FOR UNINTERRUPTED LENGTHS GREATER THAN 24", AND 2" AT LOOM ENDS.
  - SPLICES TO BE AUTOMATED WITH SOLDER, AND ADHESIVE LINED HEAT SHRINK TUBING. CONNECTORS SHOWN FROM WIRE ENTRY SIDE, UNLESS OTHERWISE NOTED.
  - HARNESS TO BE TESTED FOR CONTENT, OPENS, SHORTS, AND CONTINUITY.
  - VENDOR TO REPLACE PIGTAILS WITH WIRING TO APPROVED MOLDINGS OR CONNECTORS. PIGTAILS SHOWN IN TERMINAL VIEW. VENDOR PART NUMBER SHOWN FOR REFERENCE ONLY. HEAT SHRINK TUBING TO BE INSTALLED OVER ALL SINGLE TERMINALS. TUBING TO COMPLETELY COVER TERMINAL AND EXTEND UP WIRE 0.5" MINIMUM. ON RING TERMINALS & FULLY INSULATED FEMALES TUBING TO COVER BARREL AND EXTEND UP WIRE 0.5" MINIMUM. SUBSTITUTE PARTS MAY BE USED BY VENDOR IF THEY ARE APPROVED FOR SAME FORM, FIT, AND FUNCTION.
  - 1.4 GA CIRCUITS AND LARGER TO HAVE SOLDERED CONNECTIONS.
  - THIS IS A PURCHASED HARNESS. NO BILL OF MATERIALS EXISTS.
  - ALL FEMALE BULLETS TO BE GREASED BY VENDOR.

REL	REL TO PRODUCTION	DHC	ECOMBA
REV	DESCRIPTION OF CHANGE	BY	DATE

PROPRIETARY  
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DO NOT SCALE DRAWING

MORGAN OLSON  
15738B200  
DATE: 07/27/2016  
ECHO#: 50804  
DESCRIPTION: HARN\_JPR\_2WR\_P&PX135 Y  
PART#: 167081200

CIRCUIT	DESCRIPTION	END POINTS	FUNCTION
000	16 WHT	A1, A2, B1	GROUND
001	16 BLK	A3, A4, B2	POWER

