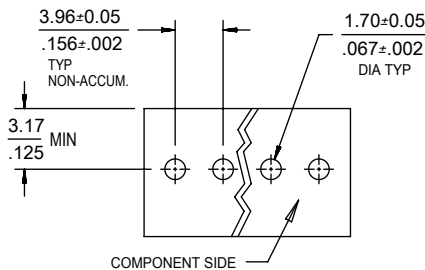


CKT	DIM. A	DIM. B
2	$\frac{7.77}{.306}$	$\frac{3.96 \pm 0.05}{.156 \pm .002}$
3	$\frac{11.73}{.462}$	$\frac{7.92 \pm 0.08}{.312 \pm .003}$
4	$\frac{15.70}{.618}$	$\frac{11.89 \pm 0.08}{.468 \pm .003}$
5	$\frac{19.66}{.774}$	$\frac{15.85 \pm 0.10}{.624 \pm .004}$
6	$\frac{23.62}{.930}$	$\frac{19.81 \pm 0.10}{.780 \pm .004}$
7	$\frac{27.58}{1.086}$	$\frac{23.77 \pm 0.10}{.936 \pm .004}$
8	$\frac{31.55}{1.242}$	$\frac{27.74 \pm 0.13}{1.092 \pm .005}$
9	$\frac{35.51}{1.398}$	$\frac{31.70 \pm 0.13}{1.248 \pm .005}$
10	$\frac{39.47}{1.554}$	$\frac{35.66 \pm 0.13}{1.404 \pm .005}$
11	$\frac{43.43}{1.710}$	$\frac{39.62 \pm 0.15}{1.560 \pm .006}$
12	$\frac{47.40}{1.866}$	$\frac{43.59 \pm 0.15}{1.716 \pm .006}$
13	$\frac{51.36}{2.022}$	$\frac{47.55 \pm 0.15}{1.872 \pm .006}$
14	$\frac{55.32}{2.178}$	$\frac{51.51 \pm 0.18}{2.028 \pm .007}$
15	$\frac{59.28}{2.334}$	$\frac{55.47 \pm 0.18}{2.184 \pm .007}$
16	$\frac{63.25}{2.490}$	$\frac{59.44 \pm 0.18}{2.340 \pm .007}$

NOTES:

- MATERIAL: HEADER-GLASS FILLED POLYESTER, 94V-0, MOLDED NATURAL (WHITE).
- FINISH: (197) OVERALL REFLOWED MATTE TIN: 0.00152/.000060 MIN. OVER 0.00127/.000050 MIN. NICKEL OVERALL (222) OVERALL MATTE TIN: 0.00254/.000100 MIN TIN OVER 0.00127/.000050 MIN NICKEL. (208) SELECT GOLD: 0.00038/.000015 MIN, SELECT TIN: 0.00254/.000100 MIN, OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN. (228) SELECT GOLD: 0.00076/.000030 MIN, SELECT TIN: 0.00254/.000100 MIN, OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN. (241) SELECT GOLD: 0.00051/.000020 MIN. SELECT TIN: 0.00254/.000100 MIN. OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.
- PRODUCT SPECIFICATION: SEE PS-08-50 & PS-40-02.
- PACKAGING INFORMATION: SEE CHARTS
- SOLDERABILITY: PER SMES-152.
- PIN PUSH-OUT FORCE: 3 LB MIN PRIOR TO SOLDERING
- PARTS ARE STACKABLE END TO END ON 3.96/.156 CENTERS.
- FOR PARTS WITH PEGS, SEE DWG.NO. SDA-42491.
- PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



RECOMMENDED PC BOARD HOLE LAYOUT

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

QUALITY SYMBOLS	CORRECT PINS	EC NO: 115161 DRWN: CSLAFTER CHK'D: MKIPPER REV APPR: FSMITH	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE	
			MM	INCH	MM/IN	2:1	
$\nabla = 0$	$\nabla = 0$	4 PLACES ±	±	DRWN BY	DATE	KK .156 HEADER ASSY FLAT VERT W/O PEGS	
$\nabla = 0$	$\nabla = 0$	3 PLACES ±	± 0.01	JSCHAFFER	2003/11/03		
$\nabla = 0$	$\nabla = 0$	2 PLACES ±	± 0.25 ± 0.015	CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING	
$\nabla = 0$	$\nabla = 0$	1 PLACES ±	± 0.38 ±	SAMIEC	2004/03/24		
$\nabla = 0$	$\nabla = 0$	0 PLACES ±	±	APPR BY	DATE	SERIES: 41771 MATERIAL NUMBER: SEE CHART CUSTOMER: GENERAL MARKET	
$\nabla = 0$	$\nabla = 0$	ANGULAR TOL ± 0.5		MARGULIS	2004/03/24		
$\nabla = 0$	$\nabla = 0$	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE	THIRD ANGLE PROJECTION	DOCUMENT NUMBER: SD-41771-001 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF *	
$\nabla = 0$	$\nabla = 0$			A			

RELEASE STATUS	RELEASE DATE
----------------	--------------

2-*	K1
1	K1
SHEET	REV

OPTIONS	Group	A-41771-0002/0016	Group	A-41771-0899/0913	Group	A-41771-0916/0930	Group	A-41771-0036/0050
	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016
	Pin No:	43294-0214	Pin No:	43294-0209	Pin No:	43294-0210	Pin No:	43294-0419
	Plating:	197 – TIN	Plating:	208 - GOLD	Plating:	228 – GOLD	Plating:	197 – TIN
	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720	Pin Length L	23.88 / .940
	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	11.43 / .450	Mating M	16.97 / .668
	Gold Loc G	N/A	Gold Loc G	6.86 / .270	Gold Loc G	6.86 / .270	Gold Loc G	N/A
	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.56 / .140	PC Tail P	3.61 / .142
	Tin Loc T	OVERALL	Tin Loc T	4.06 / .160	Tin Loc T	4.06 / .160	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE
	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-60-2020	A-41771-0002	41771-0899	A-41771-0899	41771-0916	A-41771-0916	26-60-2021	A-41771-0036
3	26-60-2030	A-41771-0003	41771-0900	A-41771-0900	41771-0917	A-41771-0917	26-60-2031	A-41771-0037
4	26-60-2040	A-41771-0004	41771-0901	A-41771-0901	41771-0918	A-41771-0918	26-60-2041	A-41771-0038
5	26-60-2050	A-41771-0005	41771-0902	A-41771-0902	41771-0919	A-41771-0919	26-60-2051	A-41771-0039
6	26-60-2060	A-41771-0006	41771-0903	A-41771-0903	41771-0920	A-41771-0920	26-60-2061	A-41771-0040
7	26-60-2070	A-41771-0007	41771-0904	A-41771-0904	41771-0921	A-41771-0921	26-60-2071	A-41771-0041
8	26-60-2080	A-41771-0008	41771-0905	A-41771-0905	41771-0922	A-41771-0922	26-60-2081	A-41771-0042
9	26-60-2090	A-41771-0009	41771-0906	A-41771-0906	41771-0923	A-41771-0923	26-60-2091	A-41771-0043
10	26-60-2100	A-41771-0010	41771-0907	A-41771-0907	41771-0924	A-41771-0924	26-60-2101	A-41771-0044
11	26-60-2110	A-41771-0011	41771-0908	A-41771-0908	41771-0925	A-41771-0925	26-60-2111	A-41771-0045
12	26-60-2120	A-41771-0012	41771-0909	A-41771-0909	41771-0926	A-41771-0926	26-60-2121	A-41771-0046
13	26-60-2130	A-41771-0013	41771-0910	A-41771-0910	41771-0927	A-41771-0927	26-60-2131	A-41771-0047
14	26-60-2140	A-41771-0014	41771-0911	A-41771-0911	41771-0928	A-41771-0928	26-60-2141	A-41771-0048
15	26-60-2150	A-41771-0015	41771-0912	A-41771-0912	41771-0929	A-41771-0929	26-60-2151	A-41771-0049
16	26-60-2160	A-41771-0016	41771-0913	A-41771-0913	41771-0930	A-41771-0930	26-60-2161	A-41771-0050

REV:	<u>ECM NFORMATION:</u>		<u>TITLE:</u>			<u>SHEET No.</u>
<b>K1</b>	ECM No.: 115161		<b>KK 156 HEADER ASSY FLAT VERT W/O PEGS</b>			<b>- 2 -</b>
	DATE: 4/5/2017					
<u>DOCUMENT NUMBER:</u>	<u>DOC TYPE:</u>	<u>DOC PART:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>	
<b>SD- 41771-001</b>	<b>PSD</b>	<b>002</b>	<b>CSLAFATER</b>	<b>MKIPPER</b>	<b>FSMITH</b>	

Group	A-41771-0933/0947	Group	A-41771-0950/0964	Group	A-41771-0019/0033	Group	A-41771-0053/0067	
Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016	
Pin No:	43294-0416	Pin No:	43294-0417	Pin No:	43294-0215	Pin No:	43294-0420	
Plating:	208 – GOLD	Plating:	228 – GOLD	Plating:	241 – GOLD	Plating:	241 – GOLD	
Pin Length L	23.88 / .940	Pin Length L	23.88 / .940	Pin Length L	18.29 / .720	Pin Length L	23.88 / .940	
Mating M	16.89 / .665	Mating M	16.89 / .665	Mating M	11.43 / .450	Mating M	16.97 / .668	
Gold Loc G	8.89 / .350	Gold Loc G	8.89 / .350	Gold Loc G	6.85/ .270	Gold Loc G	8.89/ .350	
PC Tail P	3.68 / .145	PC Tail P	3.68 / .145	PC Tail P	3.56 / .140	PC Tail P	3.61 / .142	
Tin Loc T	4.06 / .160	Tin Loc T	4.06 / .160	Tin Loc T	4.06/ .160	Tin Loc T	4.06/ .160	
Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	
Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	
Ckts	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	41771-0933	A-41771-0933	41771-0950	A-41771-0950	26-61-2020	A-41771-0019	26-61-2021	A-41771-0053
3	41771-0934	A-41771-0934	41771-0951	A-41771-0951	26-61-2030	A-41771-0020	26-61-2031	A-41771-0054
4	41771-0935	A-41771-0935	41771-0952	A-41771-0952	26-61-2040	A-41771-0021	26-61-2041	A-41771-0055
5	41771-0936	A-41771-0936	41771-0953	A-41771-0953	26-61-2050	A-41771-0022	26-61-2051	A-41771-0056
6	41771-0937	A-41771-0937	41771-0954	A-41771-0954	26-61-2060	A-41771-0023	26-61-2061	A-41771-0057
7	41771-0938	A-41771-0938	41771-0955	A-41771-0955	26-61-2070	A-41771-0024	26-61-2071	A-41771-0058
8	41771-0939	A-41771-0939	41771-0956	A-41771-0956	26-61-2080	A-41771-0025	26-61-2081	A-41771-0059
9	41771-0940	A-41771-0940	41771-0957	A-41771-0957	26-61-2090	A-41771-0026	26-61-2091	A-41771-0060
10	41771-0941	A-41771-0941	41771-0958	A-41771-0958	26-61-2100	A-41771-0027	26-61-2101	A-41771-0061
11	41771-0942	A-41771-0942	41771-0959	A-41771-0959	26-61-2110	A-41771-0028	26-61-2111	A-41771-0062
12	41771-0943	A-41771-0943	41771-0960	A-41771-0960	26-61-2120	A-41771-0029	26-61-2121	A-41771-0063
13	41771-0944	A-41771-0944	41771-0961	A-41771-0961	26-61-2130	A-41771-0030	26-61-2131	A-41771-0064
14	41771-0945	A-41771-0945	41771-0962	A-41771-0962	26-61-2140	A-41771-0031	26-61-2141	A-41771-0065
15	41771-0946	A-41771-0946	41771-0963	A-41771-0963	26-61-2150	A-41771-0032	26-61-2151	A-41771-0066
16	41771-0947	A-41771-0947	41771-0964	A-41771-0964	26-61-2160	A-41771-0033	26-61-2161	A-41771-0067

REV:	ECM INFORMATION:	TITLE:	SHEET No.		
<b>K1</b>	ECM No.: 115161	<b>KK 156 HEADER ASSY FLAT VERT W/O PEGS</b>	<b>- 3 -</b>		
	DATE: 4/5/2017				
DOCUMENT NUMBER:	DOC TYPE:	DOC PART:	CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
<b>SD- 41771-001</b>	<b>PSD</b>	<b>002</b>	<b>CSLAFTER</b>	<b>MKIPPER</b>	<b>FSMITH</b>

Group	A-41771-0115/0129	Group	A-41771-0195/0209	Group	A-41771-0212/0226	Group	A-41771-0229/0243	
Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016	
Pin No:	43294-0214	Pin No:	43294-1003	Pin No:	43294-0400	Pin No:	43294-0598	
Plating:	197 – TIN	Plating:	197 – TIN	Plating:	197 – TIN	Plating:	197 – TIN	
Pin Length L	18.29 / .720	Pin Length L	39.62 / 1.560	Pin Length L	23.37 / .920	Pin Length L	28.70 / 1.130	
Mating M	11.43 / .450	Mating M	32.97 / 1.298	Mating M	16.31/ .642	Mating M	21.56 / .849	
Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G	N/A	Gold Loc G	N/A	
PC Tail P	3.56 / .140	PC Tail P	3.35 / .132	PC Tail P	3.76 / .148	PC Tail P	3.84 / .151	
Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T	OVERALL	Tin Loc T	OVERALL	
Voided Ckts	2	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	NONE	
Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	
CKTS	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2	26-62-2020	A-41771-0115	26-60-2023	A-41771-0195	27-60-2021	A-41771-0212	27-60-2022	A-41771-0229
3	26-62-2030	A-41771-0116	26-60-2033	A-41771-0196		A-41771-0213	27-60-2032	A-41771-0230
4	26-62-2040	A-41771-0117	26-60-2043	A-41771-0197		A-41771-0214	27-60-2042	A-41771-0231
5	26-62-2050	A-41771-0118	26-60-2053	A-41771-0198		A-41771-0215	27-60-2052	A-41771-0232
6	26-62-2060	A-41771-0119	26-60-2063	A-41771-0199		A-41771-0216	27-60-2062	A-41771-0233
7	26-62-2070	A-41771-0120	26-60-2073	A-41771-0200	27-60-2071	A-41771-0217	27-60-2072	A-41771-0234
8	26-62-2080	A-41771-0121	26-60-2083	A-41771-0201	27-60-2081	A-41771-0218	27-60-2082	A-41771-0235
9	26-62-2090	A-41771-0122	26-60-2093	A-41771-0202		A-41771-0219	27-60-2092	A-41771-0236
10	26-62-2100	A-41771-0123	26-60-2103	A-41771-0203	27-60-2101	A-41771-0220	27-60-2102	A-41771-0237
11	26-62-2110	A-41771-0124	26-60-2113	A-41771-0204		A-41771-0221	27-60-2112	A-41771-0238
12	26-62-2120	A-41771-0125	26-60-2123	A-41771-0205	27-60-2121	A-41771-0222	27-60-2122	A-41771-0239
13	26-62-2130	A-41771-0126	26-60-2133	A-41771-0206		A-41771-0223	27-60-2132	A-41771-0240
14	26-62-2140	A-41771-0127	26-60-2143	A-41771-0207		A-41771-0224	27-60-2142	A-41771-0241
15	26-62-2150	A-41771-0128	26-60-2153	A-41771-0208		A-41771-0225	27-60-2152	A-41771-0242
16	26-62-2160	A-41771-0129	26-60-2163	A-41771-0209		A-41771-0226	27-60-2162	A-41771-0243

REV:	<u>ECM INFORMATION:</u>	<u>TITLE:</u>	<u>SHEET No.</u>
<b>K1</b>	ECM No.: 115161	<b>KK 156 HEADER ASSY FLAT VERT W/O PEGS</b>	<b>- 4 -</b>
	DATE: 4/5/2017		
<u>DOCUMENT NUMBER:</u>	<u>DOC TYPE:</u>	<u>DOC PART:</u>	<u>CREATED / REVISED BY:</u>
<b>SD- 41771-001</b>	<b>PSD</b>	<b>002</b>	<b>CSLAFTER</b>
<u>CHECKED BY:</u>		<u>APPROVED BY:</u>	
<b>MKIPPER</b>		<b>FSMITH</b>	

	Group	A-41771-0695/0709	Group	A-41771-0882/0896	Group	A-417710763/0769	Group	A-41771-0772/0778
	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0002/0016
	Pin No:	43294-0662	Pin No:	43294-0950	Pin No:	43294-0214	Pin No:	43294-0214
	Plating:	241 - GOLD	Plating:	241 - GOLD	Plating:	197 - TIN	Plating:	197 - TIN
	Pin Length L	30.48 / 1.200	Pin Length L	38.10 / 1.500	Pin Length L	18.29 / .720	Pin Length L	18.29 / .720
	Mating M	13.49 / .531	Mating M	31.62 / 1.245	Mating M	11.43 / .450	Mating M	11.43 / .450
	Gold Loc G	6.85/ .270	Gold Loc G	7.62/ .300	Gold Loc G	N/A	Gold Loc G	N/A
	PC Tail P	13.69 / .539	PC Tail P	3.18 / .125	PC Tail P	3.84 / .140	PC Tail P	3.84 / .140
	Tin Loc T	5.08/ .200	Tin Loc T	5.08/ .200	Tin Loc T	OVERALL	Tin Loc T	OVERALL
	Voided Ckts	NONE	Voided Ckts	NONE	Voided Ckts	3, 5, 7, 8, 10	Voided Ckts	3, 10
	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK
CKTS	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number	Material No	Engineer Number
2		A-41771-0695	41771-0882	A-41771-0882				
3		A-41771-0696	41771-0883	A-41771-0883				
4		A-41771-0697	41771-0884	A-41771-0884				
5	26-61-2052	A-41771-0698	41771-0885	A-41771-0885				
6		A-41771-0699	41771-0886	A-41771-0886				
7		A-41771-0700	41771-0887	A-41771-0887				
8	26-61-2082	A-41771-0701	41771-0888	A-41771-0888				
9		A-41771-0702	41771-0889	A-41771-0889				
10		A-41771-0703	41771-0890	A-41771-0890		A-41771-0763	27-66-2101	A-41771-0772
11		A-41771-0704	41771-0891	A-41771-0891	27-66-2110	A-41771-0764		A-41771-0773
12		A-41771-0705	41771-0892	A-41771-0892		A-41771-0765		A-41771-0774
13		A-41771-0706	41771-0893	A-41771-0893		A-41771-0766		A-41771-0775
14		A-41771-0707	41771-0894	A-41771-0894		A-41771-0767		A-41771-0776
15		A-41771-0708	41771-0895	A-41771-0895		A-41771-0768		A-41771-0777
16		A-41771-0709	41771-0896	A-41771-0896		A-41771-0769		A-41771-0778

REV:	<u>ECM INFORMATION:</u>		<u>TITLE:</u>			<u>SHEET No.</u>
<b>K1</b>	ECM No.: 115161		<b>KK 156 HEADER ASSY FLAT VERT W/O PEGS</b>			<b>- 5 -</b>
	DATE: 4/5/2017					
<u>DOCUMENT NUMBER:</u>	<u>DOC TYPE:</u>	<u>DOC PART:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>	
<b>SD- 41771-001</b>	<b>PSD</b>	<b>002</b>	<b>CSLAFTER</b>	<b>MKIPPER</b>	<b>FSMITH</b>	

	Group	A-41771-0781/0785	Group	A-41771-0972/0986	Group	A-41771-1007	Group	
	Header No:	41770-0002/0016	Header No:	41770-0002/0016	Header No:	41770-0003	Header No:	
	Pin No:	43294-0214	Pin No:	43294-0832	Pin No:	43294-0212	Pin No:	
	Plating:	197 – TIN	Plating:	197 – TIN	Plating:	222 – TIN	Plating:	
	Pin Length L	18.29 / .720	Pin Length L	35.05 / 1.380	Pin Length L	18.29 / .720	Pin Length L	
	Mating M	11.43 / .450	Mating M	15.93 / .627	Mating M	11.43 / .450	Mating M	
	Gold Loc G	N/A	Gold Loc G	NA	Gold Loc G	N/A	Gold Loc G	
	PC Tail P	3.84 / .140	PC Tail P	15.82 / .623	PC Tail P	3.56 / .140	PC Tail P	
	Tin Loc T	OVERALL	Tin Loc T	OVERAL	Tin Loc T	OVERALL	Tin Loc T	
	Voided Ckts	4, 12	Voided Ckts	NONE	Voided Ckts	2	Voided Ckts	
	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	417710000-PK	Pack Per	
CKTS	Material No	Engineer Number	Material No		Material No		Material No	Engineer Number
2			41771-0972					
3			41771-0973		41771-1007			
4			41771-0974					
5			41771-0975					
6			41771-0976					
7			41771-0977					
8			41771-0978					
9			41771-0979					
10			41771-0980					
11			41771-0981					
12	27-66-2122	A-41771-0781	41771-0982					
13		A-41771-0782	41771-0983					
14		A-41771-0783	41771-0984					
15		A-41771-0784	41771-0985					
16		A-41771-0785	41771-0986					

REV:	<u>ECM NFORMATION:</u>	<u>TITLE:</u>	<u>SHEET No.</u>
<b>K1</b>	ECM No.: 115161	<b>KK 156 HEADER ASSY FLAT VERT W/O PEGS</b>	<b>- 6 -</b>
	DATE: 4/5/2017		
<u>DOCUMENT NUMBER:</u>	<u>DOC TYPE:</u>	<u>DOC PART:</u>	<u>CREATED / REVISED BY:</u>
<b>SD- 41771-001</b>	<b>PSD</b>	<b>002</b>	<b>CSLAFTER</b>
			<u>CHECKED BY:</u>
			<b>MKIPPER</b>
			<u>APPROVED BY:</u>
			<b>FSMITH</b>