

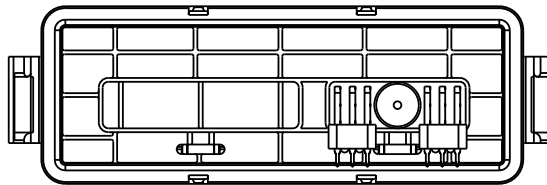
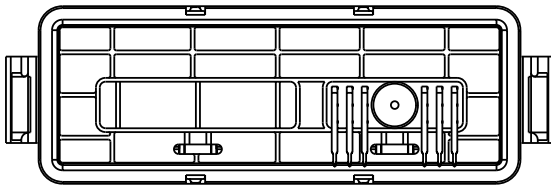
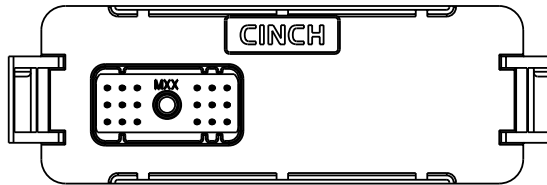
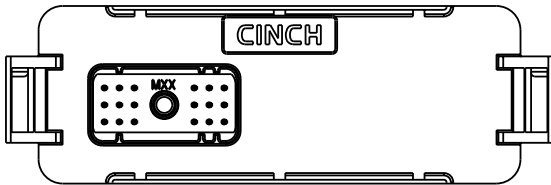
## CINCH PART NUMBER MATRIX

**P/N: 581 01 18 032**

**P/N: 581 01 18 033**

**18-WAY HEADER ASSEMBLY WITHOUT FERRITE FILTERS**

**18-WAY HEADER ASSEMBLY WITH FERRITE FILTERS**



**MATES WITH CINCH HARNESS CONNECTORS P/N:  
581 01 18 023 (18-WAY)**

**NOTE:**

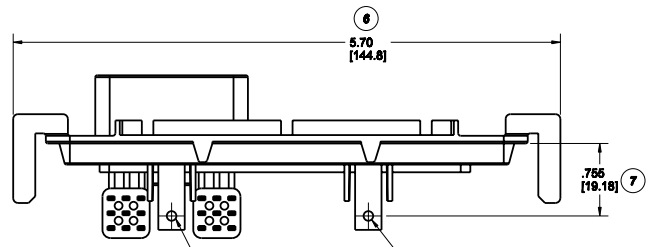
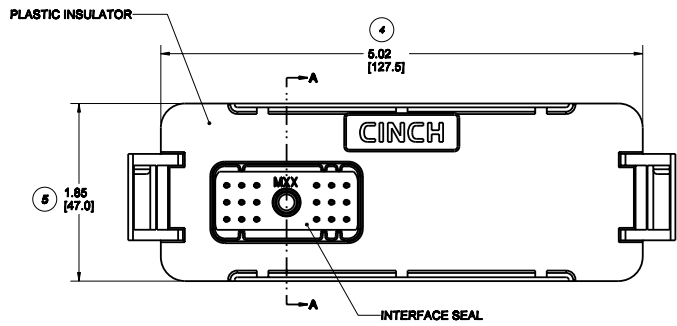
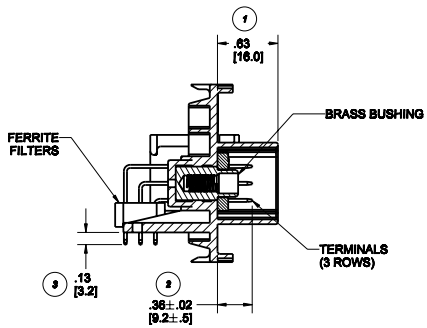
1. ALL DIMENSIONS ARE IN INCHES;  
DIMENSION INSIDE [X]X ARE IN MM, AS REF. ONLY.
2. MATERIALS:  
INTERFACE SEAL: SILICONE RUBBER, COLOR BLUE;  
INSULATOR: 30 % GLASS FILLED POLYMER, COLOR BLACK;  
BUSHING: BRASS ALLOY, UNPLATED 10-24 UNC THREAD;  
TERMINAL BLADE: 1.5 MM BRASS WITH TIN OVER NICKEL PLATING;  
FILTERS: FERRITE BLOCKS.
3. ALL HEADERS ARE REFLOW OR WAVE SOLDERING PROCESS, ROHS COMPLIANT.
4. MATES WITH CINCH SHS PUSH-TO-SEAT HARNESS CONNECTORS (SEE TABLE ABOVE).
5. THERMALLY CONDUCTIVE ADHESIVE PASTE SOLD SEPARATELY: RECOMMENDED IS LOCTITE 383.
6. MOSFET SPRING PLATES ARE SOLD SEPARATELY (FOR INSTALLATION REFER TO ENCLOSURE ASSEMBLY INSTRUCTIONS)  
SPRING LABELED AS "L" IS CINCH P/N: 581 00 00 020 AND SPRING LABELED AS "R" IS CINCH P/N: 581 00 00 021.  
(IT IS RECOMMENDED THAT THE 4 SLOTS BE PROTECTED DURING CONFORMAL COATING)
7. STANDARD PACKAGE SIZE: 72 PARTS/CARTON BOX.

**DRAWING REVISIONS**

REV	DOCUMENT	APP	DATE
A	REL. FOR PRODUCTION D.O. 05-1167	A.C.	7/21/05
B	ECN: 05A458 ADDED LEGS AND ADDED SLOTS TO RIBB	A.C.	9/27/05
C	ECN: 05A022 ADDED SHEET 5 ADDED SHEET 6 MODIFIED SHEET 3 MODIFIED SHEET 4	A.C.	3/23/06
D	ECN: 05A410 REFORMATTED DRAWING FOR LAYOUTS REDRAWN WITH ADDITIONAL KEEP OUT AREAS	A.C.	9/29/06

**RoHS COMPLIANT**

SAFETY	ENGLISH	PRO/E	Cinch	18-WAY HEADERS MODICE SE
DO NOT SCALE DRAWING	DRAWN BY <b>B. KOSTIC</b>	DATE <b>09/03/04</b>	CONTROL SPEC NUMBER <b>A 14562</b>	
1. LABEL DIMENSIONS SPECIFIED ALL DIMENSIONS ARE IN INCHES	DESIGN ENGINEER <b>B. KOSTIC</b>	DATE <b>09/03/04</b>		
2. PULLER/DRILL 3. DRILL/DRILL 4. DRILL/DRILL 5. DRILL/DRILL 6. DRILL/DRILL 7. DRILL/DRILL	DESIGN VERIFICATION ENGINEER <b>A. CAINES</b>	DATE <b>11/18/04</b>	SEE NOTE 2.	
8. DRILL/DRILL 9. DRILL/DRILL 10. DRILL/DRILL 11. DRILL/DRILL 12. DRILL/DRILL	APPL. ENGINEERING <b>R. GARZA</b>	DATE <b>11/18/04</b>	DRAWING NUMBER <b>581 01 18 032 S</b>	
13. DRILL/DRILL 14. DRILL/DRILL 15. DRILL/DRILL 16. DRILL/DRILL 17. DRILL/DRILL 18. DRILL/DRILL	QUALITY ASSURANCE <b>R. QUIROZ</b>	DATE <b>11/18/04</b>	SHEET 1 OF 8	



CINCH P/N: 581 01 18 033 SHOWN  
(HEADER WITH FILTERS)

FOR PCB MOUNTING, #4  
SELF-TAPPING SCREW IS  
RECOMMENDED. TORQUE: 2-3  
IN\* LBS. [0.23-0.34 Nm]

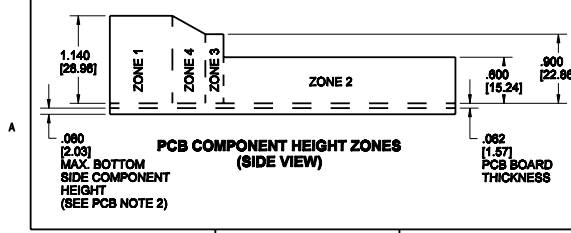
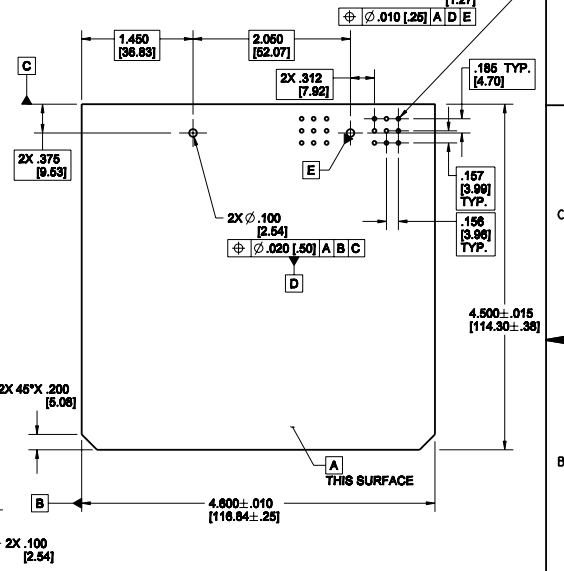
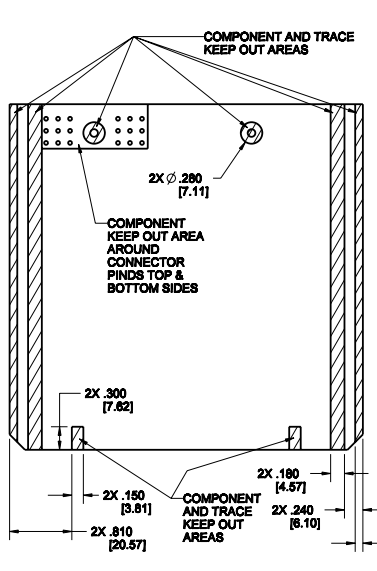
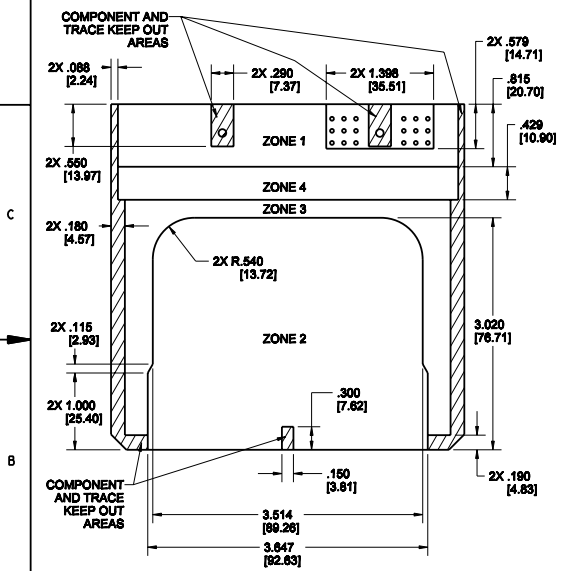
UNITS	ENGLISH	<b>Cinch</b>	TED FILEY NO. L06BARD, L. 0246
DO NOT SCALE DRAWING		TITLE	
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		18-WAY HEADERS MODICE SE	
FILE NUMBER	5810118033	PRO/E DRAWING	
FILE NUMBER	5810118033	REV	D
DATE	02/11/08	DRWING NUMBER	581 01 18 032 S
DESIGNED BY	71785	SCALE	1:1
CHECKED BY		SHEET	2 OF 8

### PCB LAYOUT WITHOUT HEAT SINKS

#### PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

#### PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

#### PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



PCB COMPONENTS HEIGHT LIMIT				
	ZONE 1	ZONE 2	ZONE 3	ZONE 4
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.140"	.600"	.900"	SEE PCB NOTE 3

- PCB NOTES:**
- ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
  - THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 8 SIDE VIEW).
  - AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.

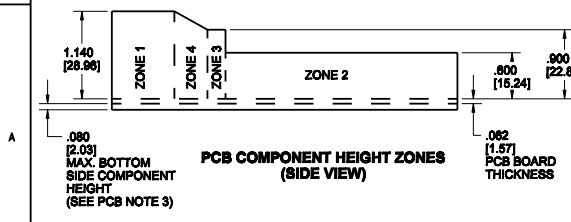
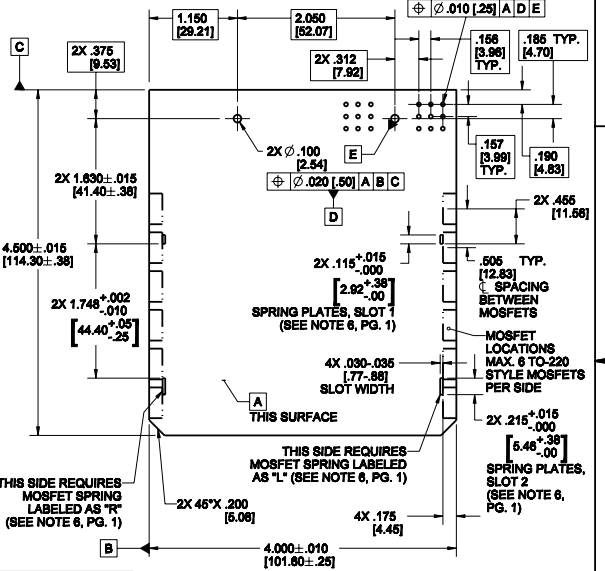
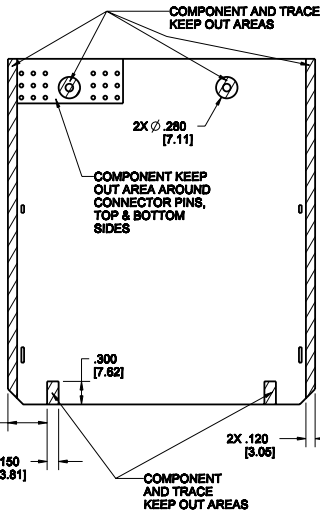
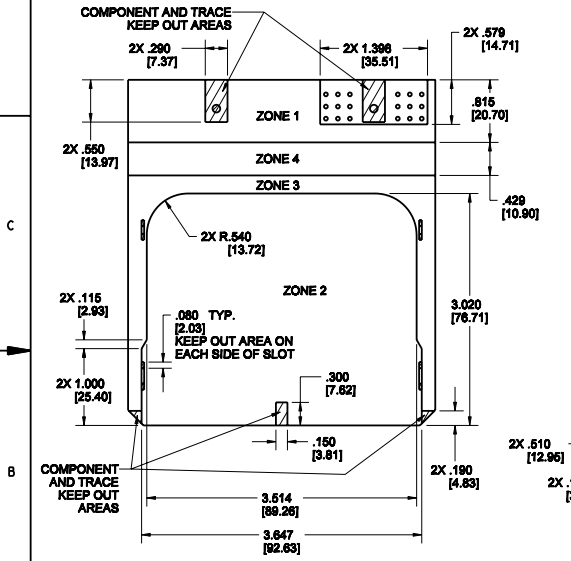
UNITS	ENGLISH		1780 FILE# NO. LOWBOARD, L. 02/96
DO NOT SCALE DRAWING			18-WAY HEADERS MODICE SE
FILE NUMBER	71786	PRO/E DRAWING	REV D
DRAWING NUMBER	581 01 18 032 S	SCALE	4:5 SHEET 3 OF 8

# PCB LAYOUT WITH TWO HEAT SINKS

## PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

## PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

## PCB OVERALL DIMENSIONS AND HOLE LOCATIONS



### PCB COMPONENTS HEIGHT LIMIT

	ZONE 1	ZONE 2	ZONE 3	ZONE 4
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.140"	.600"	.900"	SEE PCB NOTE 4

**PCB NOTES:**

1. IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
2. ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
3. THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 8 SIDE VIEW).
4. AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.

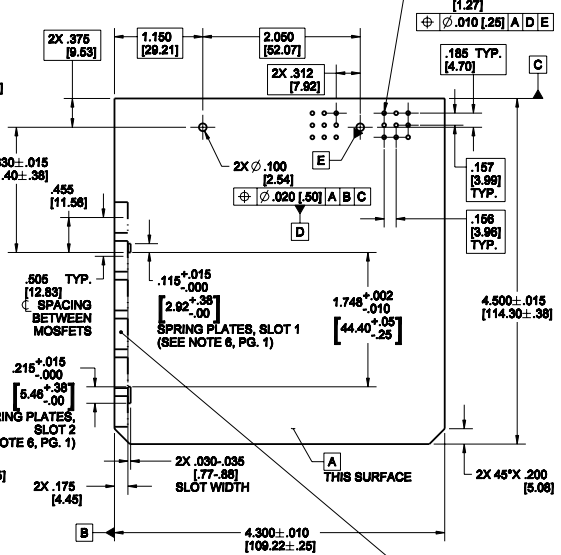
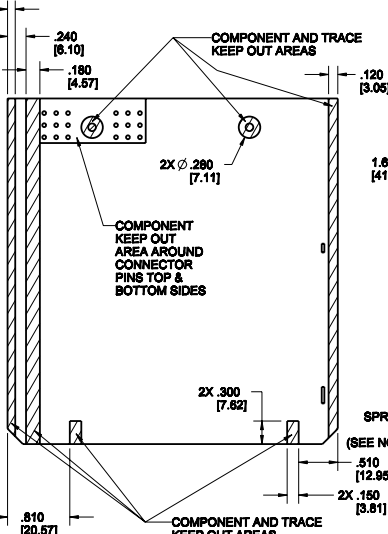
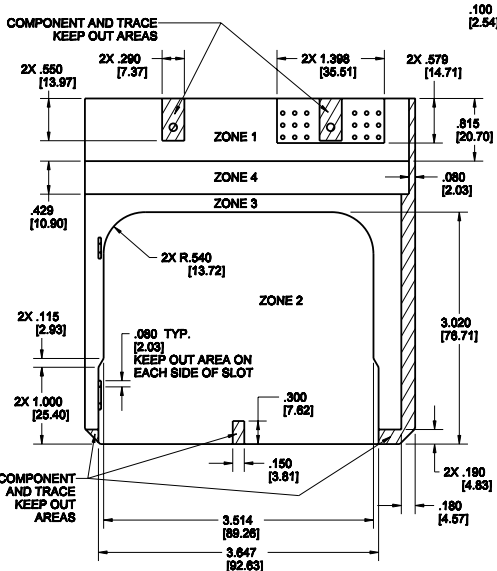
UNITS	ENGLISH	<b>Cinch</b>	1785 FILE# NO.
DO NOT SCALE DRAWING			LOWBALL, L. 6246
USE SEE DIMENSIONS SPECIFIC ALL DIMENSIONS ARE IN INCHES	TITLE	18-WAY HEADERS MODICE SE	
FILE NUMBER	581 01 18 032 S	PRO/E DRAWING	
DATE	7/17/86	SCALE	4:5
DESIGNED BY		DRAWING NUMBER	581 01 18 032 S
CHECKED BY		DATE	
APPROVED BY		REV	D
DATE		SHEET	4 OF 8

### PCB LAYOUT WITH ONE HEAT SINK

#### PCB TOP SIDE GENERAL ZONING & KEEP OUT AREAS

#### PCB BOTTOM SIDE GENERAL ZONING & KEEP OUT AREAS

#### PCB OVERALL DIMENSIONS AND HOLE LOCATIONS

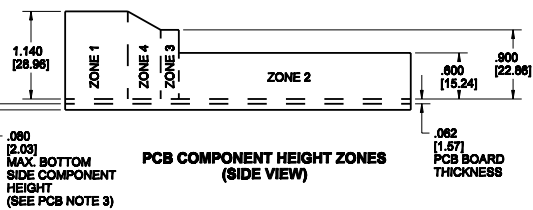


#### PCB COMPONENTS HEIGHT LIMIT

	ZONE 1	ZONE 2	ZONE 3	ZONE 4
MAX. HEIGHT FOR COMPONENTS (ABOVE PCB)	1.140"	.600"	.900"	SEE PCB NOTE 4

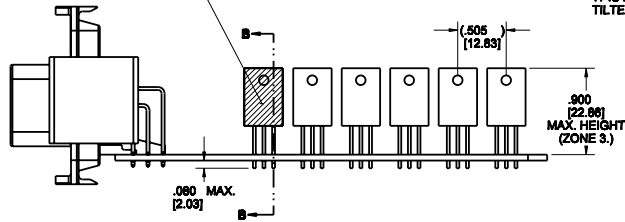
#### PCB NOTES:

- IF MOSFET SPRINGS ARE USED, ZONE 3 SHOULD CONTAIN ONLY MOSFETS AND TRACES BETWEEN THE SPRINGS AND EDGE OF THE BOARD.
- ON BOTTOM SIDE OF THE PCB, COMPONENTS OR TRACES MUST BE MIN. .100" AWAY FROM THE EDGE OF THE PCB.
- THE BOTTOM SIDE OF THE PCB SHOULD NOT HAVE COMPONENTS OR LEADS THAT EXTEND HIGHER THAN .080" (SEE PG. 6 SIDE VIEW).
- AREA HAS VARIABLE HEIGHT. SEE PCB COMPONENT HEIGHT ZONES VIEW FOR DETAILS.



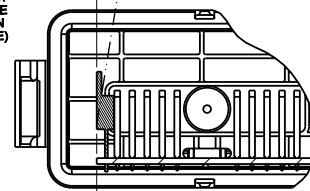
UNITS	ENGLISH	<b>Cinch</b>	1785 FILE NO. L08490, L. 0248
DO NOT SCALE DRAWING			
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		18-WAY HEADERS MODICE SE	
FILE NUMBER	581032S	PRO/E DRAWING	
DATE	02-14-08	REV	D
DESIGNED BY	71785	SCALE	4:5
CHECKED BY		DRAWING NUMBER	5810118032S
DATE		SHEET	5 OF 6

APPLY THIN BEAD OF THERMALLY CONDUCTIVE ADHESIVE PASTE TO ENTIRE MOSFET SURFACE. (SEE NOTE 5.)



**SIDE VIEW  
REQUIRED TO-220 PACKAGE PROFILE**

FOR EASE OF ASSEMBLY IT IS RECOMMENDED THAT MOSFET(S) BE TILTED UP TO 10° IN POSITIVE DIRECTION (SEE DOTTED LINE)



MOSFET MUST LIE IN THE SAME PLANE WITH EDGE OF PCB (AS SHOWN)

**REQUIRED TO-220 PACKAGING PROFILE  
PARTIAL SECTION B-B**

UNITS	ENGLISH	<b>Cinch</b>	THIS FILE # IS LOWBALL, L. 6746
DO NOT SCALE DRAWING			
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES		TITLE 18-WAY HEADERS MODICE SE	
FILE NUMBER 75 500	DATE 03/09/08	PRO/E DRAWING	
DESIGNED BY JES	DATE 03/11/08	DOC FILE NUMBER 88011808L_HEADERS	DRAWING NUMBER <b>581 01 18 032 S</b>
THIS DOCUMENT IS THE PROPERTY OF CINCH. REUSE OF THIS DOCUMENT WITHOUT THE WRITTEN CONSENT OF CINCH IS PROHIBITED.	DATE 03/11/08	DATE 03/11/08	REV <b>D</b>
		71785	SCALE 1:1 SHEET 6 OF 6