

GPS AND AIR-DATA COMPUTER WIRING
FOR G4 TWIN ENGINE AND G9 SINGLE ENGINE

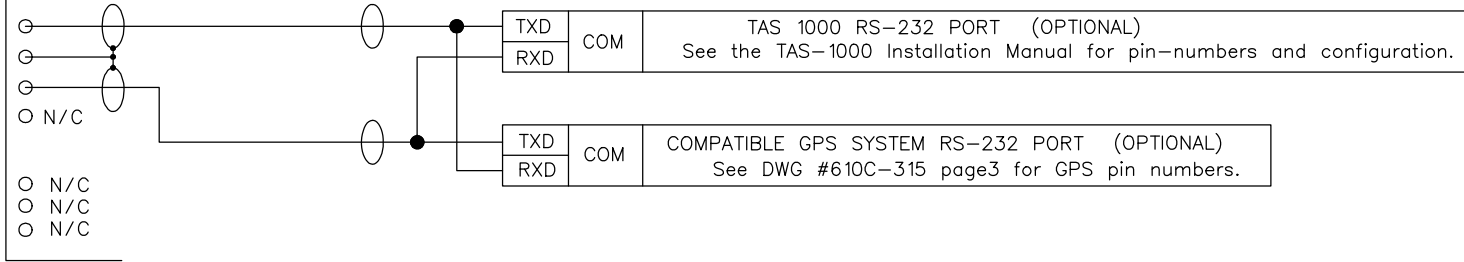
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	First issue.	10 DEC 10	JY
B	Added notes for GPS.	24 JAN 13	JY
C	Added notes for single engine installation.	1 OCT 13	JY

G4-002 MOD. A GEM DISPLAY

P2 (D-SUB 37 RECEPTACLE) D-SUB 37 PLUG

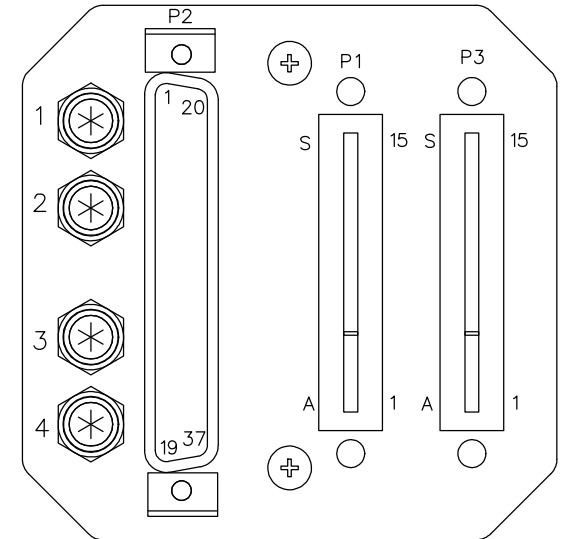
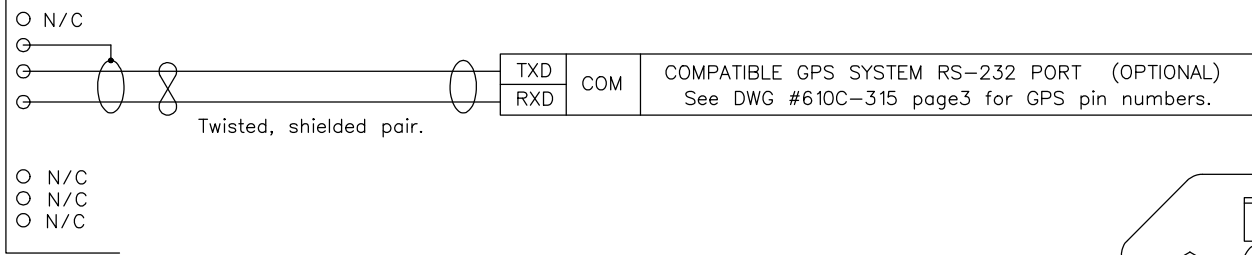
COM3 RXD	14
DGND	33
COM2 RXD	24
COM3 TXD	32
RESERVED A	31
RESERVED B	13
RESERVED	25

USE THIS CONFIGURATION TO CONNECT TO A GPS AND A TAS-1000 SYSTEM.



COM3 RXD	14
DGND	33
COM2 RXD	24
COM3 TXD	32
RESERVED A	31
RESERVED B	13
RESERVED	25

USE THIS CONFIGURATION TO CONNECT TO A GPS WITH NO TAS-1000 SYSTEM.



NOTES:

1. Use 24 AWG copper wire with TEFZEL or equivalent insulation unless otherwise specified.
2. Refer to the TAS-1000 Installation Manual for pin numbers and configuration.
3. Refer to the GPS manufacturers data for pin numbers and configuration.

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G4/G9 DSUB 37-PIN INTERCONNECT DIAGRAM

Insight Avionics Inc.
Box 122, Fort Erie, Ontario L2A 5M6

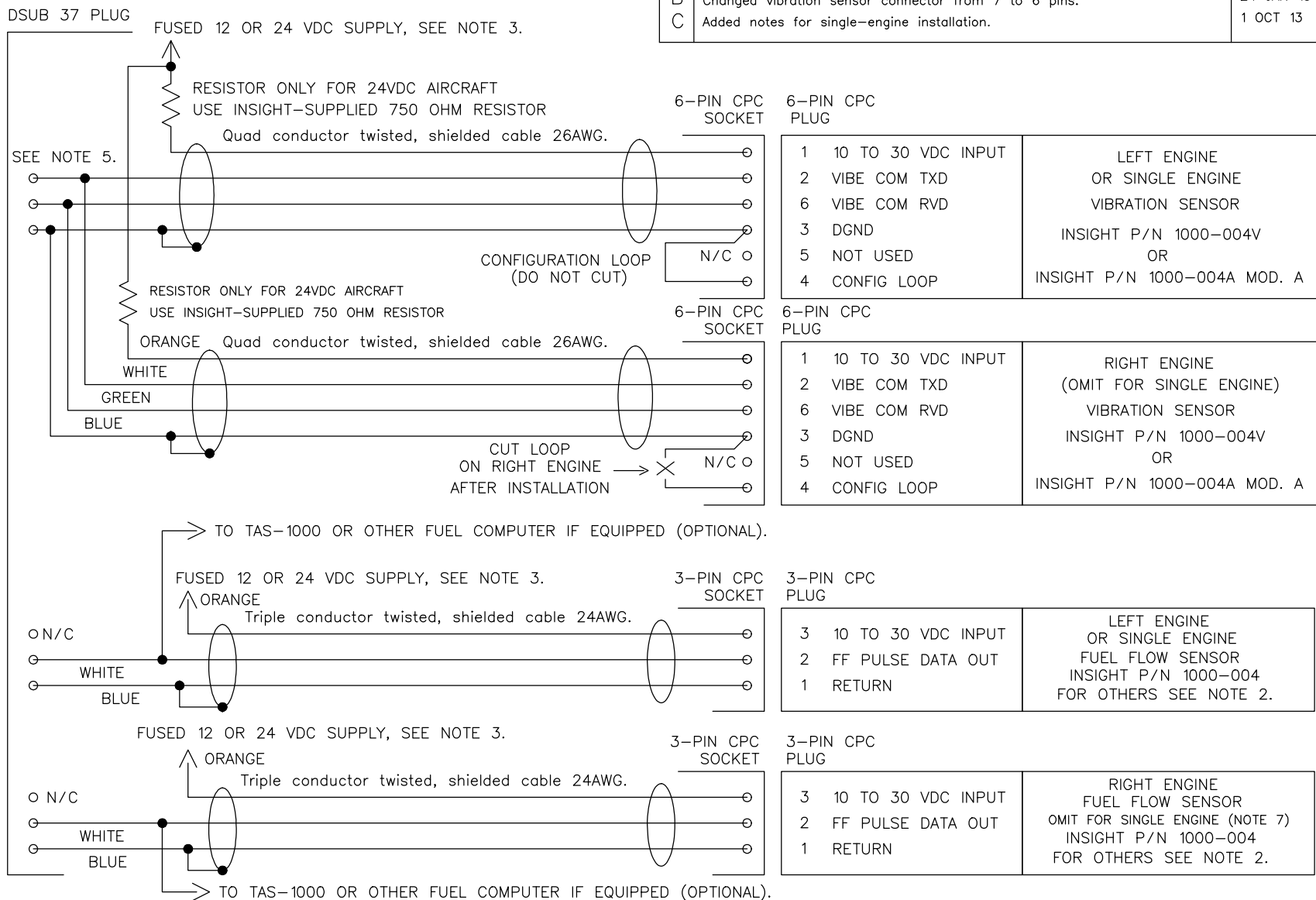
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SIZE	FILE NAME:	DRAWING NO.	DRN	CKD	QCD	REV
	G4in3C	G4-315	JY	JY	JY	C
SCALE	DATE	SHEET	3 OF 3			
NONE	1 OCT 13					

FUEL FLOW AND VIBRATION SENSOR WIRING FOR G4 TWIN AND G9 SINGLE

G4-002 GEM DISPLAY
MOD. A
P2 (DSUB 37 SOCKET)

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	FIRST ISSUE	10 DEC 10	JY
B	Changed vibration sensor connector from 7 to 6 pins.	24 JAN 13	JY
C	Added notes for single-engine installation.	1 OCT 13	JY



COM 1 RVD 23
COM 1 TXD 5
DGND 4

FF1A 12
FF1 11
FF1-GND 30

FF2A 35
FF2 16
FF2-GND 17

6-PIN CPC SOCKET	6-PIN CPC PLUG	LEFT ENGINE OR SINGLE ENGINE VIBRATION SENSOR INSIGHT P/N 1000-004V OR INSIGHT P/N 1000-004A MOD. A
1	10 TO 30 VDC INPUT	
2	VIBE COM TXD	
6	VIBE COM RVD	
3	DGND	
5	NOT USED	
4	CONFIG LOOP	

6-PIN CPC SOCKET	6-PIN CPC PLUG	RIGHT ENGINE (OMIT FOR SINGLE ENGINE) VIBRATION SENSOR INSIGHT P/N 1000-004V OR INSIGHT P/N 1000-004A MOD. A
1	10 TO 30 VDC INPUT	
2	VIBE COM TXD	
6	VIBE COM RVD	
3	DGND	
5	NOT USED	
4	CONFIG LOOP	

3-PIN CPC SOCKET	3-PIN CPC PLUG	LEFT ENGINE OR SINGLE ENGINE FUEL FLOW SENSOR INSIGHT P/N 1000-004 FOR OTHERS SEE NOTE 2.
3	10 TO 30 VDC INPUT	
2	FF PULSE DATA OUT	
1	RETURN	

3-PIN CPC SOCKET	3-PIN CPC PLUG	RIGHT ENGINE FUEL FLOW SENSOR OMIT FOR SINGLE ENGINE (NOTE 7) INSIGHT P/N 1000-004 FOR OTHERS SEE NOTE 2.
3	10 TO 30 VDC INPUT	
2	FF PULSE DATA OUT	
1	RETURN	

NOTES:

1. Use 24 AWG copper wire with TEFZEL or equivalent insulation unless otherwise specified.
2. For connection to other fuel flow sensors use P/N 610C-025, see Drawing no. 101116A.
3. Connect FF and vibration sensor VDC inputs to same +V supply as GEM P1-harness, Pin S.
4. Note that a 750 Ohm resistor is required for each vibration sensor in 24 Volt aircraft.
5. Use pigtail connections where multiple wires connect to a single pin.
6. Refer to TAS-1000 Installation Manual for pin-numbers.
7. May be configured for single engine return fuel line, contact Insight.



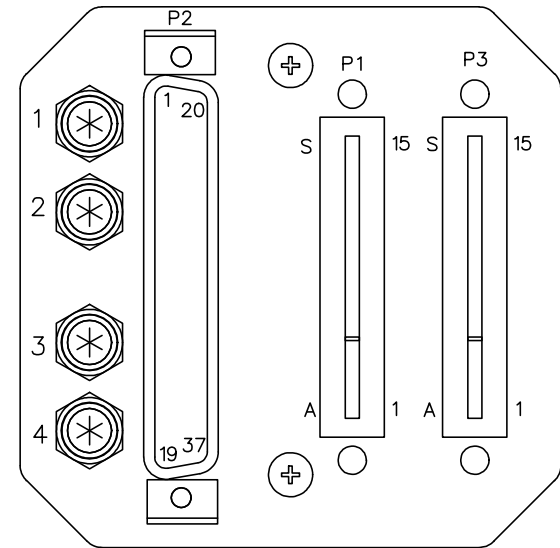
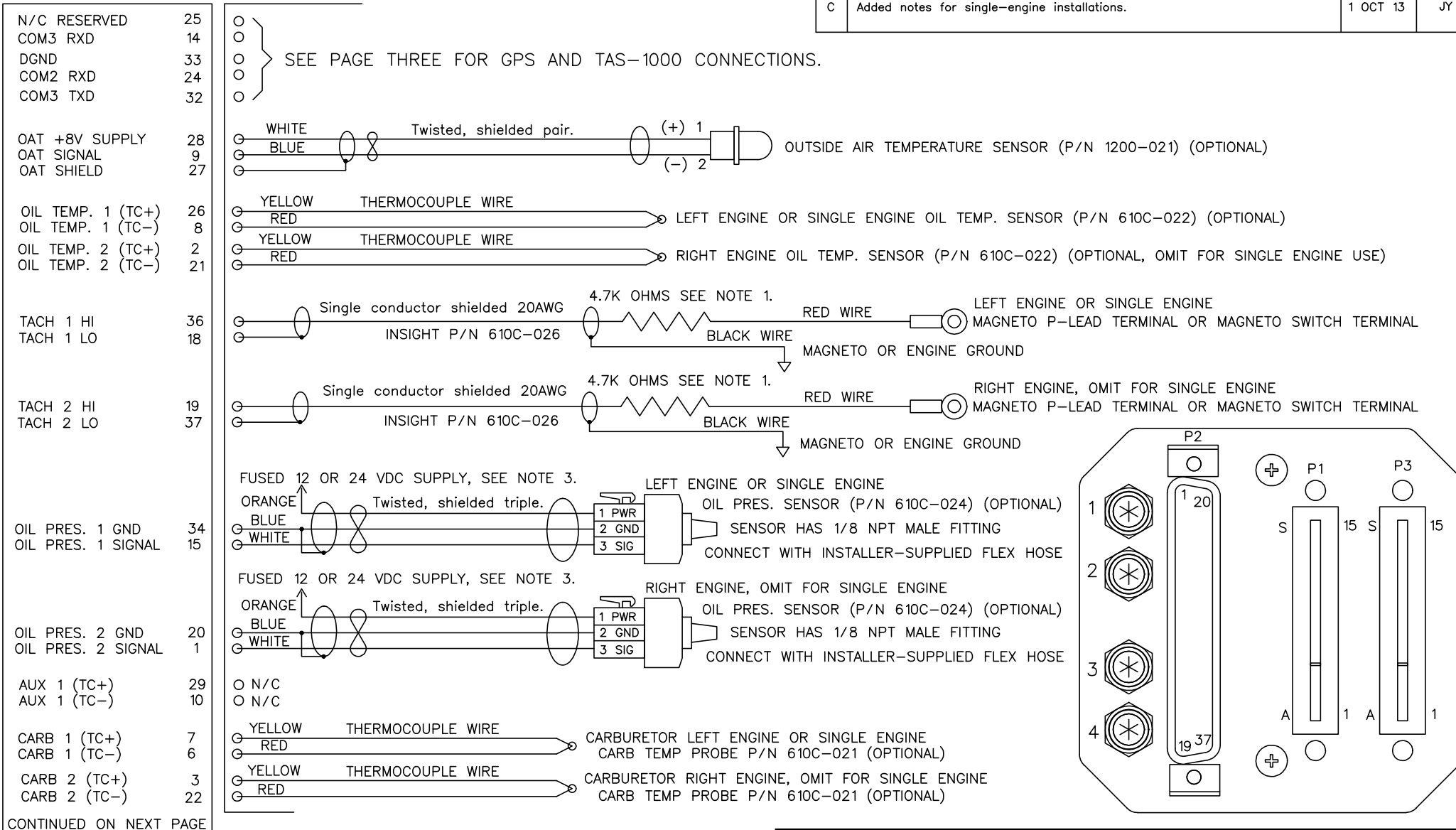
G4/G9 DSUB 37-PIN INTERCONNECT DIAGRAM

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SIZE	FILE NAME: G4in2C	DRAWING NO. G4-315	DRN	CKD	QCD	REV C
SCALE	DATE	SHEET				
NONE	1 OCT 13	2 OF 3				

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	First issue.	10 DEC 10	JY
B	Added Page Three for GPS and TAS-1000.	24 JAN 13	JY
C	Added notes for single-engine installations.	1 OCT 13	JY



CONTINUED ON NEXT PAGE

- NOTES:
- IMPORTANT! USE INSIGHT CABLE P/N 610C-026 WITH 4,700 OHM POWER RESISTOR, ONE WATT (AS SUPPLIED).
 - FOR FUEL FLOW AND VIBRATION SENSORS SEE NEXT PAGE.
 - Connect Oil Pressure Sensor Pin 1 to same +V supply as GEM P1-Harness, Pin 3.
 - Use 24 AWG copper wire with TEFZEL or equivalent insulation unless otherwise specified.

THERMOCOUPLE WIRE			
TYPE	JACKET	POSITIVE	NEGATIVE
K	YELLOW	YELLOW	RED
J	BLACK	WHITE	RED

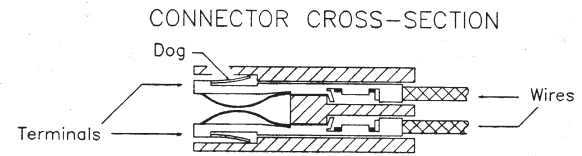
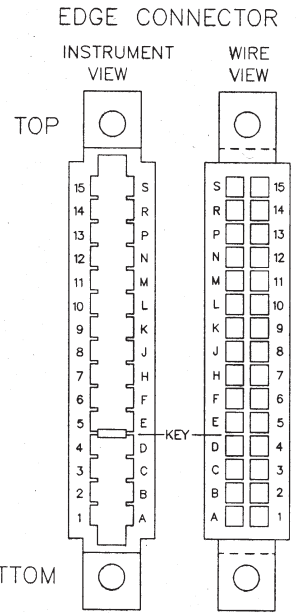
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G4/G9 DSUB 37-PIN INTERCONNECT DIAGRAM

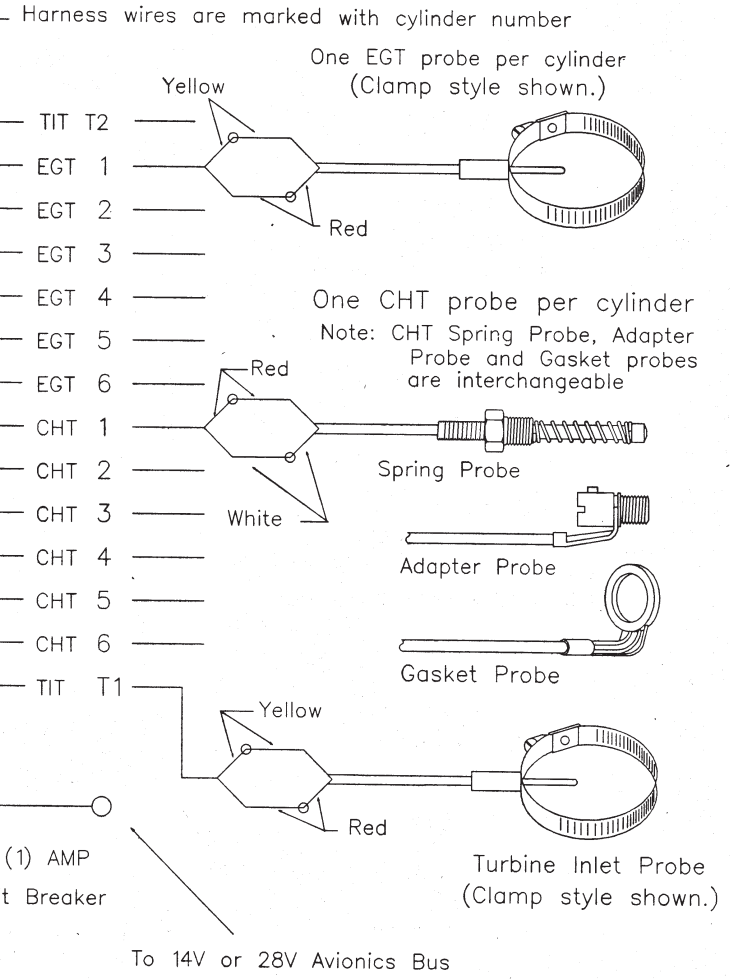
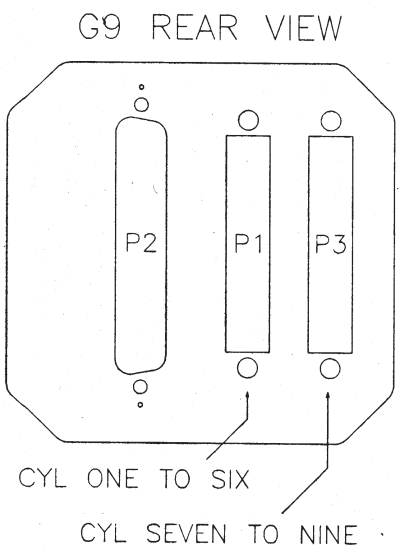
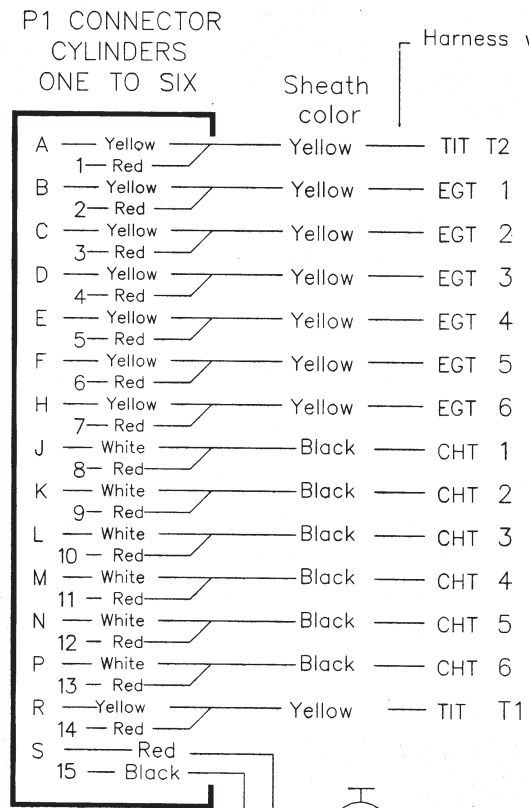
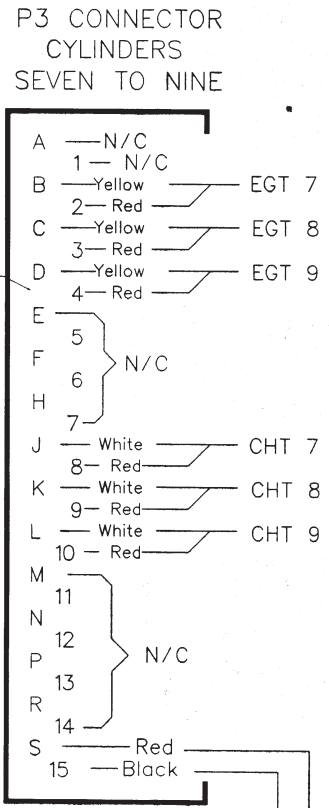
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SIZE	FILE NAME:	DRAWING NO.	DRN	CKD	QCD	REV
NONE	G4in1C	G4-315	JY	JY	JY	C
SCALE	DATE	SHEET				
	1 OCT 13	1 OF 3				

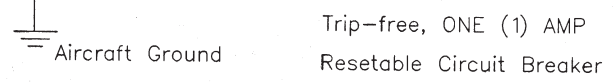
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



- NOTES:**
- For 7 cylinder engines omit probe wires for cylinders 8 and 9.
 - For 5 cylinder engines omit probe wires for cylinders 6 to 9.
 - Power and ground wires 24 AWG.
 - Insight EGT probes and TIT probes, clamp and screw-in type are interchangeable.



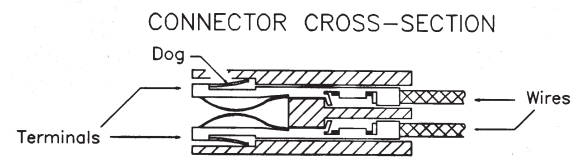
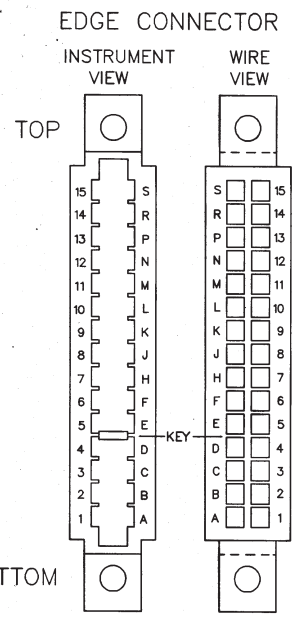
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**G9 GEM WIRING DIAGRAM
(EGT/CHT/TIT FOR RADIAL ENGINE)**

Insight Instrument Corp.
Box 122, Fort Erie, Ontario L2A 5M6

SIZE A	FILE NAME: G9WIRED	DRAWING NO. 131001	DRN 98	CKD dt	QCD 98	REV -
SCALE NONE	DATE OCT 1/2013	SHEET 1 OF 1				

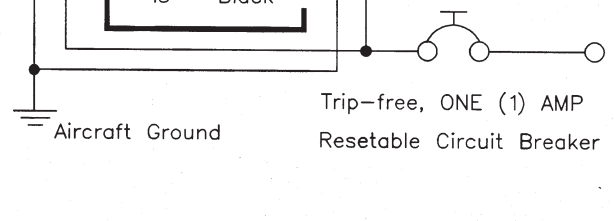
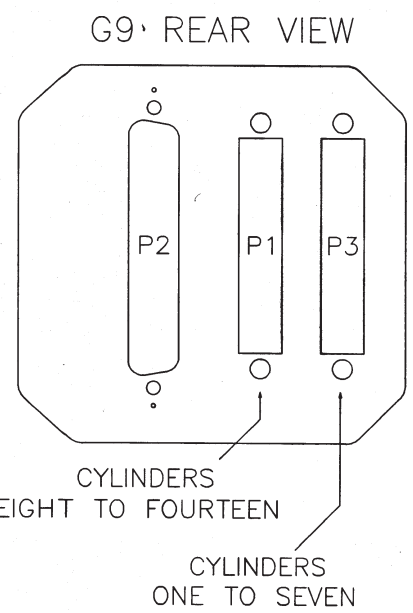
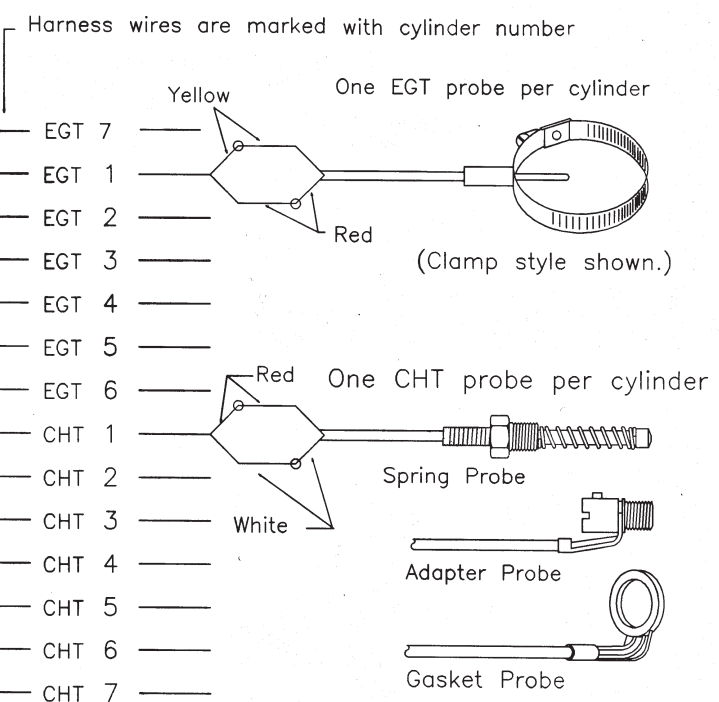
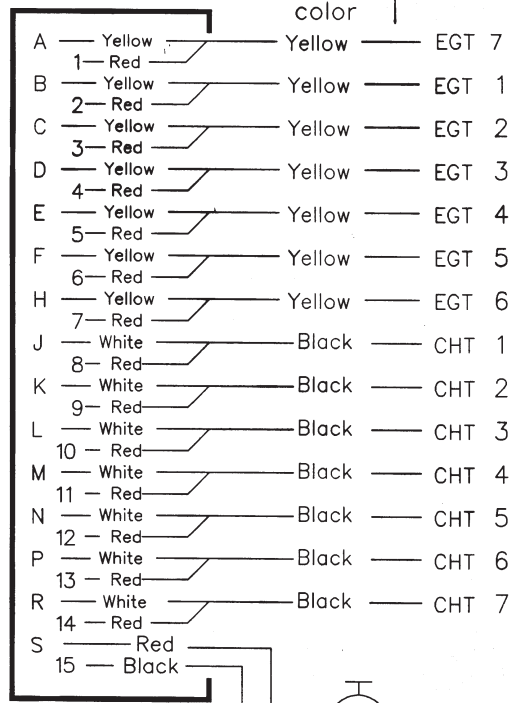
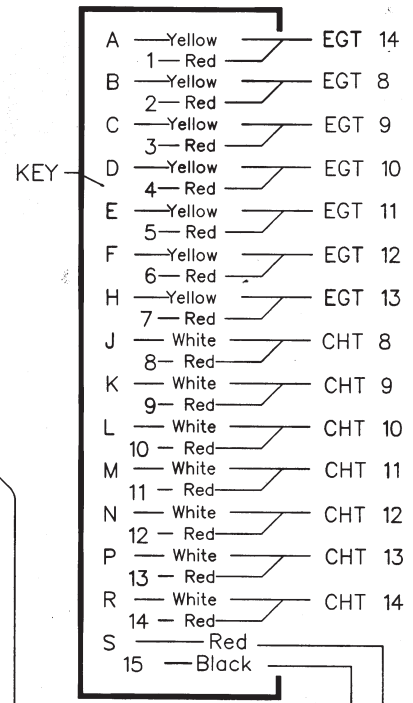
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

P1 CONNECTOR
CYLINDERS
EIGHT TO FOURTEEN

P3 CONNECTOR
CYLINDERS
ONE TO SEVEN



- NOTES:
1. Power and ground wires 24 AWG.
 2. Insight EGT probes and TIT probes, clamp and screw-in type are interchangeable.

Insight

G9 GEM EGT AND CHT WIRING FOR 14-CYLINDER RADIAL ENGINE

Insight Instrument Corp.
Box 122, Fort Erie, Ontario L2A 5M6

SIZE A	FILE NAME: G14WIRED	DRAWING NO. 131005	DRN <i>JS</i>	CKD <i>JS</i>	QCD <i>JS</i>	REV -
SCALE NONE	DATE OCT 1/2013	SHEET 1 OF 1				

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