

GEA 24

J241					
Pin	Name	I/O	To	Wire	Fuse
1	CAN HI	I/O	CAN Bus	22	
2	CAN LO	I/O	CAN Bus	22	
3	RESERVED				
4	RS-232 RX	IN	HDU 450 #2	22	
5	RS-232 TX	OUT	HDU 450 #2	22	
6	RS-232 GROUND		HDU 450 #2	22	
7	AIRCRAFT POWER 1	IN	Avionics Bus	22	2a
8	AIRCRAFT POWER 2	IN	IPS	22	2a
9	GROUND		Ground	22	

List of Sensors	Connector	Pins
CHT Thermocouple x4	J242	many
EGT Thermocouple x4	J242	many
Oil Temp	J243	32/33 (?)
Oil Pressure	J243	16/17/19
Fuel Level	J244	6/7
Fuel Flow	J243	20/23/24
Manifold Pressure	J243	12/13/15
Turbo Temp???	J242	4/16
Ammeter Shunt	J243	36/37
Tachometer	J243	8 (only?)
Voltage	J244	25/28

J242				
Pin	Name	I/O	Wire	Notes
1	RESERVED	IN		
2	CHT6 LO	IN		
3	EGT6 LO	IN		
4	CHT5 LO	IN		Turbo Temp??
5	EGT5 LO	IN		
6	CHT4 LO	IN		
7	EGT4 LO	IN		
8	CHT3 LO	IN		
9	EGT3 LO	IN		
10	CHT2 LO	IN		
11	EGT2 LO	IN		
12	CHT1 LO	IN		
13	EGT1 LO	IN		
14	CHT6 HI	IN		
15	EGT6 HI	IN		
16	CHT5 HI	IN		Turbo Temp???
17	EGT5 HI	IN		
18	CHT4 HI	IN		
19	EGT4 HI	IN		
20	CHT3 HI	IN		
21	EGT3 HI	IN		
22	CHT2 HI	IN		
23	EGT2 HI	IN		
24	CHT1 HI	IN		
25	EGT1 HI	IN		

J243				
Pin	Name	I/O	To	Wire
1	FUEL PRESS GROUND			
2	FUEL PRESS GROUND	IN		
3	FUEL PRESS XDCR +12V	OUT		
4	FUEL PRESS XDCR +5V	OUT		
5	RPM XDCR GROUND 2			
6	RPM 2	IN		
7	RPM XDCR GROUND 1			
8	RPM 1	IN		
9	RPM XDCR +12V 1	OUT		
10	RPM XDCR +12V 2	OUT		
11	RESERVED			
12	MANIFOLD PRESS GROUND		P4055 - Manifold	
13	MANIFOLD PRESS	IN	P4055 - Manifold	
14	MANIFOLD PRESS XDCR +12V	OUT		
15	MANIFOLD PRESS XDCR +5V	OUT	P4055 - Manifold	
16	OIL PRESS GROUND		P4055 - Oil	
17	OIL PRESS HI	IN	P4055 - Oil	
18	OIL PRESS XDCR +12V	OUT		
19	OIL PRESS XDCR +5V	OUT	P4055 - Oil	
20	FUEL XDCR GROUND 1		FT-90 Black Wire	
21	FUEL RETURN	IN		
22	FUEL XDCR GROUND 2			
23	FUEL FLOW	IN	FT-90 White Wire	
24	FUEL XDCR +12V 1	OUT	FT-90 Red Wire	
25	FUEL XDCR +12V 2	OUT		
26	GP +5V 1			
27	GP GROUND 1			
28	POS 7/TIT 2/MISC TEMP 2 LO	IN		
29	POS 7/TIT 2/MISC TEMP 2 HI	IN		
30	POS 6/TIT 1/MISC TEMP 1 LO	IN		
31	POS 6/TIT 1/MISC TEMP 1 HI	IN		
32	OIL TEMP LO	IN		
33	OIL TEMP HI	IN		
34	SHUNT 2 LO	IN		
35	SHUNT 2 HI	IN		
36	SHUNT 1 LO	IN		
37	SHUNT 1 HI	IN		

J244				
Pin	Name	I/O	To	Wire
1	SYSTEM ID 1A	IN	Leave Empty	
2	SYSTEM ID 1B/GND		Leave Empty	
3	RESERVED			
4	RESERVED			
5	FUEL QTY +5V 1	OUT		
6	FUEL QTY 1	IN	Fuel Probe Box Yellow Wire	
7	FUEL QTY GROUND			
8	FUEL QTY +5V 2	OUT		
9	FUEL QTY 2	IN		
10	FUEL QTY 2 GROUND			
11	POS 3 HI / +5V 3	OUT		
12	POS 3/GP3/FUEL QTY 3	IN		
13	POS 3 LO/GROUND			
14	POS 4 HI / +5V 4	OUT		
15	POS 4/GP4/FUEL QTY 4	IN		
16	POS 4 LO/GROUND			
17	CAN 2 HI	I/O		
18	GP1 HI / +5V	OUT		
19	GP1/POS 1	IN		
20	GP1 LO/GROUND			
21	GP2 HI / +5V	OUT		
22	GP2/POS 2	IN		
23	GP2 LO/GROUND			
24	GP +5V 2	OUT		
25	VOLTS 1	IN	J241 Pin 7	
26	GP GROUND 2			
27	GP +5V 3			
28	VOLTS 2	IN	J241 Pin 8	
29	GP GROUND 3			
30	POS 5 HI / +5V	OUT		
31	POS 5 / MISC PRESS	IN		
32	POS 5 LO/GROUND			
33	CAN 2 LO	I/O		
34	FUEL XDCR +12V 3	OUT		
35	FUEL XDCR +12V 4	OUT		
36	FUEL FLOW	IN		
37	FUEL RETURN	IN		
38	FUEL XDCR GND 3			
39	FUEL XDCR GND 4			
40	DISCRETE IN 1	IN		
41	DISCRETE IN 2	IN		
42	DISCRETE IN 3	IN		
43	DISCRETE IN 4	IN		
44	DISCRETE OUT 1 / MAST IN			
45	DISCRETE OUT 2 / MAST IN			
46	SHUNT 2 HI	IN		
47	SHUNT 2 LO	IN		
48	RESERVED			
49	RESERVED			
50	GP +12V	OUT		

GSU 25C

P251				
Pin	Name	I/O	To	Wire Fuse
1	CAN HI	I/O	CAN Bus	22
2	CAN LO		CAN Bus	22
3	RESERVED			
4	RS-232 RX 1	IN	GDU 450 #1	22
5	RS-232 TX 1	OUT	GDU 450 #1	22
6	RS-232 GROUND		GDU 450 #1	22
7	AIRCRAFT POWER 1	IN	Avionics Bus	22 2a
8	AIRCRAFT POWER 2	IN	IPS	22 2a
9	GROUND		Ground	22

P252				
Pin	Name	I/O	To	Wire
1	OAT POWER		GTP 59 White	22
2	OAT HI		GTP 59 Blue	22
3	OAT LO		GTP 59 Orange	22
4	UNIT ID 1 GROUND			
5	UNIT ID 1	IN		
6	GMU 22 ONLY			
7	GMU 22 ONLY			
8	RESERVED			
9	RS-232 TX 3	OUT	GTX 45R #1	22
10	RS-232 RX 3	IN	GTX 45R #1	22
11	GROUND		GTX 45R #1	22
12	RS-485 RX A	IN		
13	RS-485 RX B	IN		
14	GROUND			
15	RS-232 TX 2	OUT		

GSA 28

J281 (ROLL)				
Pin	Name	I/O	To	Wire Fuse
1	CAN HI	I/O	CAN Bus	22
2	CAN LO	I/O	CAN Bus	22
3	CAN TERM 1			
4	CAN TERM 2			
5	ID STRAP 1	IN		
6	ID STRAP 2	IN		
7	ID STRAP 3	IN		
8	ID STRAP 4	IN		
9	AIRCRAFT GROUND		Ground	22
10	AIRCRAFT POWER	IN	Avionics Bus	22 5a*
11	TRIM IN 1			
12	TRIM IN 2			
13	TRIM OUT 1			
14	TRIM OUT 2			
15	CWS/DISCONNECT	IN	Stick Button	22

J281 (PITCH)				
Pin	Name	I/O	To	Wire Fuse
1	CAN HI	I/O	CAN Bus	22
2	CAN LO	I/O	CAN Bus	22
3	CAN TERM 1			
4	CAN TERM 2			
5	ID STRAP 1	IN	Jump to Pin 8	22
6	ID STRAP 2	IN		
7	ID STRAP 3	IN		
8	ID STRAP 4	IN	Jump to Pin 5	22
9	AIRCRAFT GROUND		Ground	22
10	AIRCRAFT POWER	IN	Avionics Bus	22 5a*
11	TRIM IN 1			
12	TRIM IN 2			
13	TRIM OUT 1			
14	TRIM OUT 2			
15	CWS/DISCONNECT	IN	Stick Button	22

*both on one 5a fuse

GTR 20

J2001			
Pin	Name	I/O To	Wire Fuse
1	AIRCRAFT POWER	IN Comm Bus	20 7.5A
2	DISC 1	IN	22
3	RESERVED		
4	TX INTERLOCK OUT	OUT	
5	TX INTERLOCK IN	IN	
6	CAN LO	I/O CAN Bus	22
7	CAN HI	I/O CAN Bus	22
8	ID IN	IN	
9	AUX MONO IN 2	IN	
10	RECEIVER AUDIO OUT HI	OUT	
11	COPILOT HS RIGHT	Copilot Headset Jack	22
12	COPILOT HS LEFT	Copilot Headset Jack	22
13	PILOT HS RIGHT	Pilot Headset Jack	22
14	PILOT HS LEFT	Pilot Headset Jack	22
15	COPILOT PTT	Panel PTT Button	22
16	COPILOT MIC IN	Copilot Mic Jack	22
17	PILOT MIC IN	Pilot Mic Jack	22
18	MUSIC IN RIGHT	GDU 450 P4502	22
19	MUSIC IN LEFT	GDU 450 P4502	22
20	AIRCRAFT GROUND		20
21	SPARE		
22	DISC 2		
23	RESERVED		
24	RESERVED		
25	CAN TERM B		
26	CAN TERM A		
27	ID LO		
28	AUX 2 LO		
29	RECEIVER AUDIO LO		
30	COPILOT HS LO	Copilot Headset Jack	22
31	AUX 1 LO	GDU 450 P4502	22
32	AUX MONO IN 1	GDU 450 P4502	22
33	PILOT HS LO	Pilot Headset Jack	22
34	COPILOT MIC LO	Copilot Mic Jack	22
35	PILOT PTT	Stick PTT Button	22
36	PILOT MIC LO	Pilot Mic Jack	22
37	MUSIC LO	GDU 450 P4502	22

Interconnect diagram on page 29-3

Notes

Discrete - Page 26-80

Spare Audio Input
Recorder Device?

Or audio jack?
Or audio jack?

Discrete - Page 26-80

Spare Audio Input
Recorder Device?

Or audio jack?

GTX 45R

J3251				
Pin	Name	I/O	To	Wire Fuse
1	RESERVED			
2	USB DATA HI	I/O		
3	RESERVED			
4	RESERVED			
5	ARINC 429 OUT A	OUT		
6	ARINC 429 OUT B	OUT		
7	RS-232 OUT 3	OUT	GPS 20A #1	22
8	RS-232 OUT 2	OUT	GDU 450 #3	22
9	RS-232 OUT 1	OUT	GSU 25C #3	22
10	RESERVED			
11	RESERVED			
12	RESERVED			
13	RESERVED			
14	EXTERNAL STANDBY SELECT	IN		
15	GTX 35R ONLY			
16	RESERVED			
17	XPDR FAIL 1	OUT		
18	EXTERNAL SUPPRESSION	I/O		
19	RESERVED			
20	AIRCRAFT GROUND		Ground	22
21	AIRCRAFT POWER 1	IN	Avionics Bus	22 3A*
22	RESERVED			
23	RESERVED			
24	USB DATA LO			
25	RESERVED			
26	RESERVED			
27	ARINC 429 IN 1A	IN		
28	ARINC 429 IN 1B	IN		
29	RS-232 IN 3	IN	GPS 20A #1	22
30	RS-232 IN 2	IN	GDU 450 #3	22
31	RS-232 IN 1	IN	GSU 25C #3	22
32	RESERVED			
33	RESERVED			
34	RESERVED			
35	RESERVED			
36	EXTERNAL IDENT SELECT	IN		
37	RESERVED			
38	POWER CONTROL	IN	Ground	22
39	RESERVED			
40	RESERVED			
41	AIRCRAFT GROUND		Ground	22
42	AIRCRAFT POWER 1	IN	Avionics Bus	22 3A*
43	RESERVED			
44	USB VBUS POWER	IN		
45	USB GROUND			
46	RESERVED			
47	RESERVED			
48	ARINC 429 IN 2A	IN		
49	ARINC 429 IN 2B	IN		
50	RS-232 GROUND 3		GPS 20A #1	22
51	RS-232 GROUND 2		GDU 450 #3	22
52	RS-232 GROUND 1		GSU 25C #3	22
53	RESERVED			
54	RESERVED			
55	RESERVED			
56	RESERVED			
57	RESERVED			
58	RESERVED			
59	POWER CONFIG	IN	Ground	22
60	RESERVED			
61	AIRCRAFT POWER 2			
62	AIRCRAFT POWER 2			

J3252 (NOT NEEDED)	
Pin	Name
1	ETHERNET OUT 1B OUT
2	ETHERNET IN 1B IN
3	ETHERNET OUT 2B OUT
4	ETHERNET IN 2B IN
5	RS-232 OUT 4 OUT
6	ETHERNET OUT 1A OUT
7	ETHERNET IN 1A IN
8	ETHERNET OUT 2A OUT
9	ETHERNET IN 2A IN
10	RS-232 IN 4 IN
11	RS 422 A OUT
12	RS 422 B OUT
13	RESERVED
14	RESERVED
15	RS-232 4 GROUND

*both on one 3a fuse

GPS 20A

J201				
Pin	Name	I/O	To	Wire Fuse
1	CAN HI	I/O	CAN Bus	22
2	CAN LO	I/O	CAN Bus	22
3	RS-232 TX 2	OUT	ELT	22
4	RS-232 RX 1	IN	GTX 45R	22
5	RS-232 TX 1	OUT	GTX 45R	22
6	RS-232 GROUND		GTX & ELT	22
7	AIRCRAFT POWER 1	IN	Avionics Bus	22 3a
8	AIRCRAFT POWER 2	IN	IPS	22 3a
9	POWER GROUND		Ground	22

GPS 20A

J111				
Pin	Name	I/O	To	Wire Protection
1	CAN HI	I/O	CAN Bus	22
2	CAN LO	I/O	CAN Bus	22
3	UNIT ID	IN		
4	RESERVED			
5	RESERVED			
6	SIGNAL GROUND			
7	AIRCRAFT POWER 1	IN	Avionics Bus	22 2a
8	AIRCRAFT POWER 2	IN	IPS	22 2a
9	POWER GROUND		Ground	22