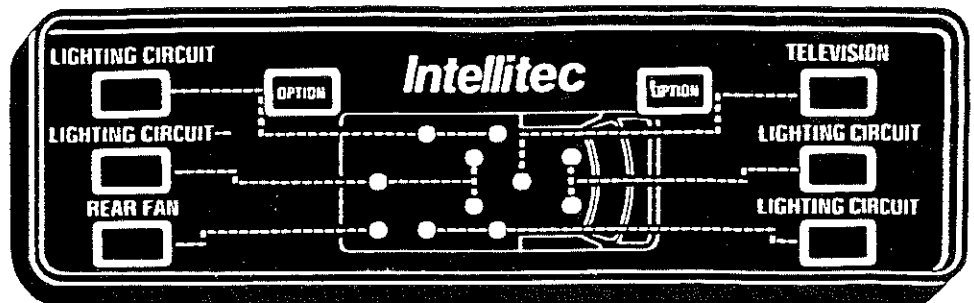


# Van Multiplex™

## INTELLITEC INTRODUCES THE NEXT GENERATION MULTIPLEX ELECTRICAL SYSTEM FOR USE IN CONVERSION VANS



Today's vans are including an ever-increasing number of electrical features each requiring additional wiring that further compounds the wiring installation and reliability. Intellitec has developed, and is now producing, the first multiplexed electrical system for use in conversion vans. This system is intended to replace the conventional wiring and switching components that have historically been used.

### New Electrical System Features

The new INTELLITEC van electrical system is a first in the industry. It provides a number of customer-pleasing features never offered before by any other system. These features come standard with the system and do not require additional modules or special wiring.

Following are important customer features in this new system:

- **Automatic Interior Light Delay** – keeps the interior lights on up to 30 seconds after closing the doors. They will go off immediately when the ignition switch is turned on.
- **Automatic Load Shut-Off** – interior lights, TV and rear air conditioner fan turn off when ignition switch is turned off.
- **Control of Rear Heat/Air Fan** – the speed is controlled by the system to provide 3 speeds and off. Fan is inoperative while the ignition is off.
- **Load Operation Without Keys** – allows the interior lights and TV to operate without the key in the ignition. This will allow their use during prolonged outings.

- **Automatic Courtesy Lights** – allows interior lights to turn on when doors are opened regardless of setting of their local on/off switch.
- **Multi-Point Control** – provides control of all the interior lighting and rear fan speed from the front overhead panel as well as multiple locations in the rear of the van.
- **Centralized Control** – the switching, fusing and communication functions are all located in the central distribution panel. If a failure occurs, this panel can be tested and replaced, if necessary. The remote switch panels offer redundant switching to make failure analysis easier.
- **Automatic One-Half Hour Load Shut-Off** – Loads turned on without a key will automatically turn off one-half hour after all doors have been closed.
- **Low Voltage Protection** – the interior lights and TV will automatically be turned off when the battery voltage drops below 11.5 volts. The system will remain inoperative until the battery voltage rises above 12 volts.
- **High Voltage Protection** – if the battery voltage rises above 21.5 volts for any reason (i.e., runaway alternator or jump-starting) the TV and lights will be turned off to avoid damage.
- **Four Minute Light Timer** – when the doors of the vehicle are left open for more than four minutes, the interior courtesy lights will automatically turn off to avoid battery drain.

### Additional Modules

The INTELLITEC Multiplex System is flexible in its ability to add features and functions as the need arises.

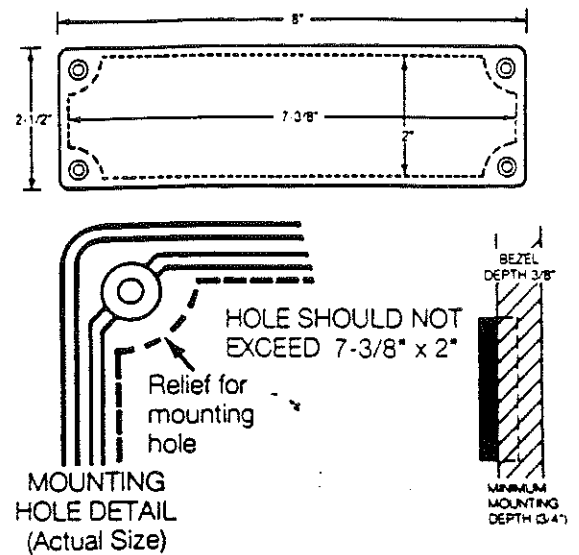


131 Eisenhower Lane North  
Lombard, Illinois 60148  
(708) 268-0010 / 1-800-251-2408

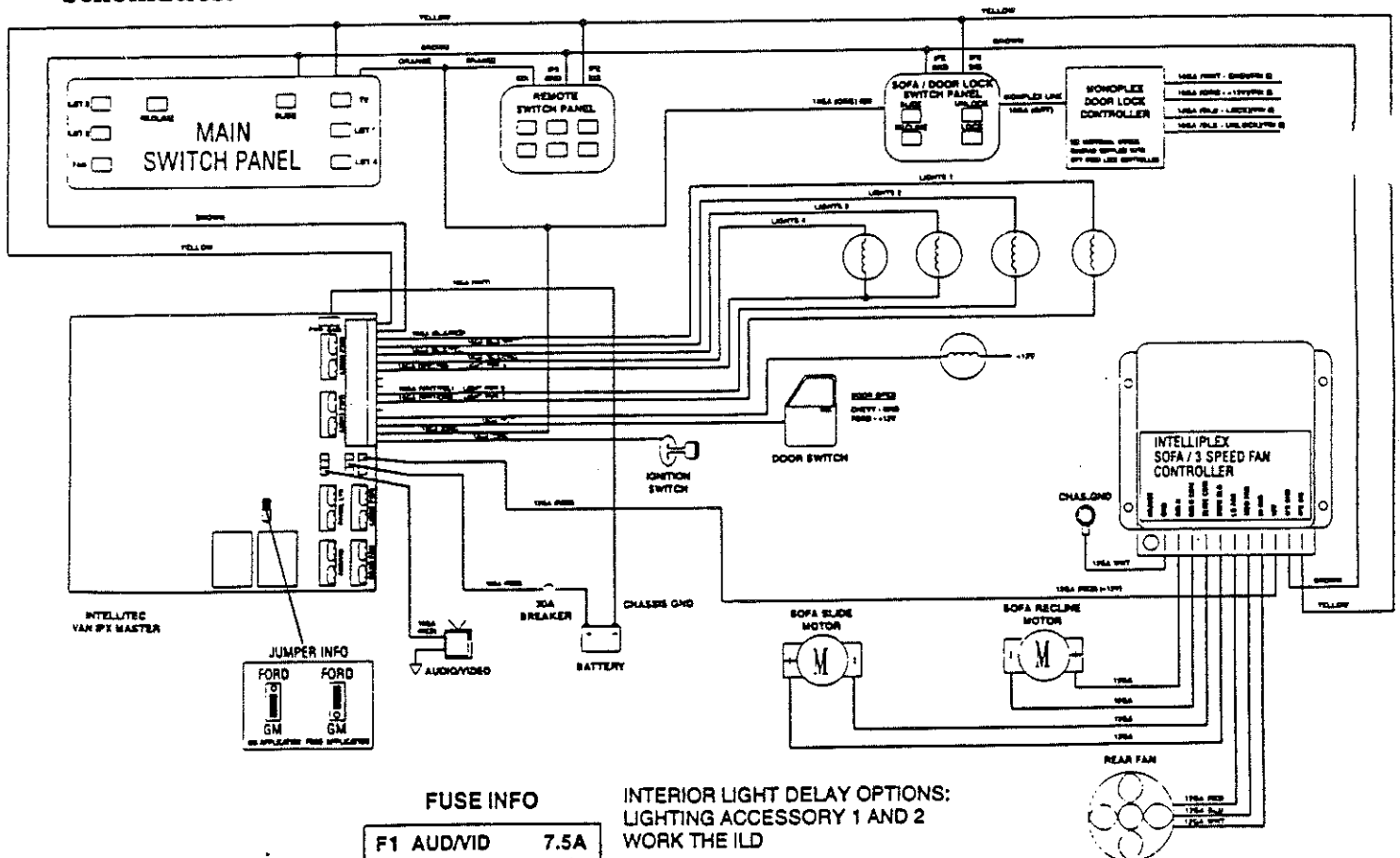
# Van Multiplex™

## Specifications:

Operating Voltage	10.0 to 16.0 Volts DC
Operating Temperature	-40.0 F to +185.0 F (-40.0 C to +85.0 C)
Interior Light Time Delay System Shutdown	20 to 40 Seconds Approximately 1/2 hr. after ignition is shut OFF and all doors are shut.
Maximum Current Ratings	
Input to Master	30.0 Amps
Lighting Circuits	5.0 Amps each of 4 Circuits
Audio/Video	7.5 Amps
Rear Fan	20.0 Amps
Low Voltage Shutdown	11.5 Amps
High Voltage Shutdown	21.5 Amps



## Schematics:



**FUSE INFO**

F1 AUD/VID	7.5A
F2 LGHT PWR	5A
F3 LGHT PWR	5A
F4 LGHT PWR	5A
F5 AUX IGN.	5A
F6 REAR FAN	20A

**INTERIOR LIGHT DELAY OPTIONS:**  
LIGHTING ACCESSORY 1 AND 2  
WORK THE ILD

TO PREVENT LIGHTING ACCESSORY 2 FROM WORKING WITH THE ILD CUT JUMPER JU2

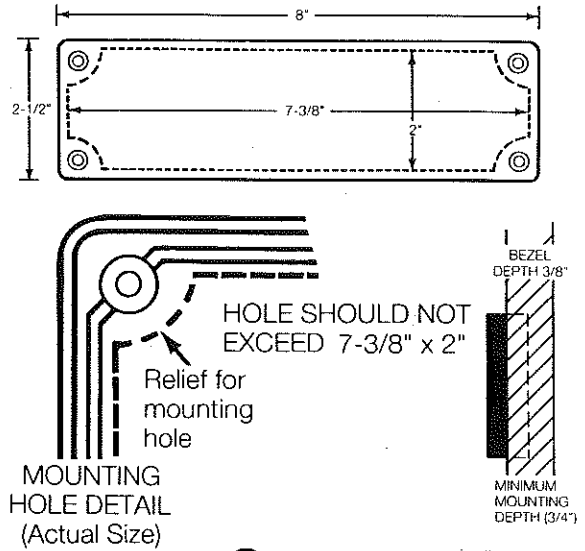
TO PREVENT LIGHTING ACCESSORY 1 FROM WORKING WITH THE ILD CUT JUMPER JU1



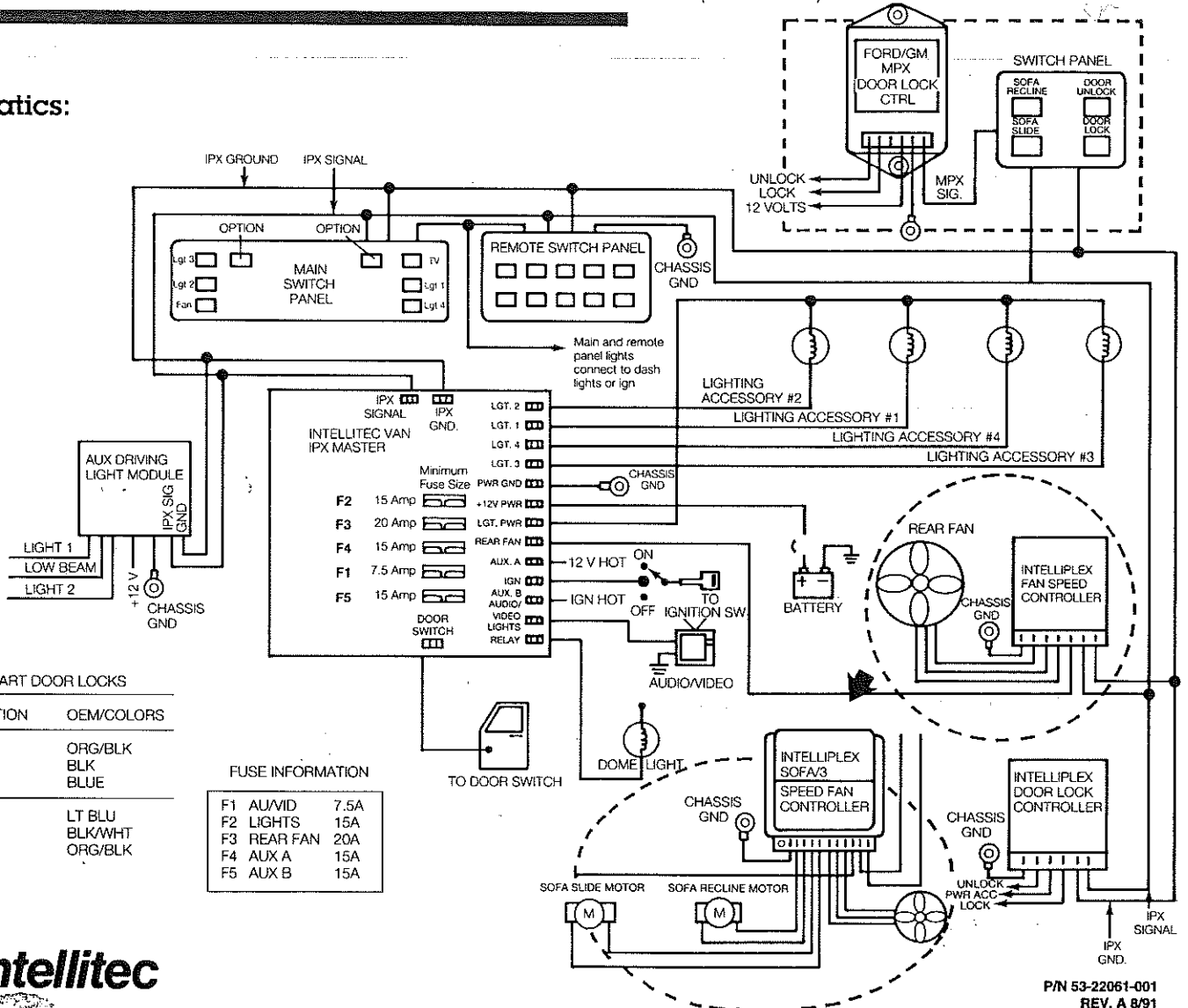
# Van Multiplex™

## Specifications:

Operating Voltage	10.0 to 16.0 Volts DC
Operating Temperature	-40.0 F to +185.0 F (-40.0 C to +85.0 C)
Interior Light Time Delay	20 to 40 Seconds
System Shutdown	Approximately 1 hr. after ignition is shut OFF and all doors are shut.
Maximum Current Ratings	
Input to Master	30.0 Amps
Lighting Circuits	15.0 Amps Total (5.0 Amps each of 4 Circuits)
Audio/Video	7.5 Amps
Rear Fan	20.0 Amps
Aux. A (Constant Hot)	15.0 Amps
Aux. B (Ign. Hot)	15.0 Amps



## Schematics:



COLOR CHART DOOR LOCKS		
MAKE	DESIGNATION	OEM/COLORS
GM	PWR ACC UNLOCK	ORG/BLK
	LOCK	BLK/BLUE
FORD	PWR ACC UNLOCK	LT BLU
	LOCK	BLK/WHT ORG/BLK

FUSE INFORMATION		
F1	AU/VID	7.5A
F2	LIGHTS	15A
F3	REAR FAN	20A
F4	AUX A	15A
F5	AUX B	15A



P/N 53-22061-001  
REV. A 8/91



1992 MULTIPLEX

19GA Yellow Signal

18GA Brown Signal Impulse

J4  J3   
 TPX SIG INX SIG  
 GND

J8   
 LGT2  
 J7

LGT1  
 J16   
 LGT4

J9   
 LGT3

J2   
 PWR GND

15 AMP  
 F2  
 J1   
 12V PWR

20 AMP  
 F3  
 J6   
 LGT PWR

15 AMP  
 F4  
 J10   
 REAR FAN

7.5 AMP  
 F1  
 J11   
 AUX A

15 AMP  
 F5  
 J13   
 IGN

J12   
 J14   
 DOOR SWITCH

J15   
 J16   
 FORD G.M.

10 GA. Purple

10 GA. Red

10 GA. Wht/Red

10 GA. Orange

10 GA. Red

10 GA. Blk/Red

10 GA. Blk/Ylw

10 GA. Wht

10 GA. Orange

10 GA. Orange

10 GA. Red

10 GA. Blk/Wht

10 GA. Blk/Wht

10 GA. Wht

10 GA. Orange

10 GA. Orange

10 GA. Red

FUSE INFORMATION

F2 LIGHTS 15 AMP

F3 REAR FAN 20 AMP

F4 AUX A 15 AMP

F1 AUDIO/VIDEO 7.5 AMP

F5 AUX B 15 AMP

MAXIMUM FUSE SIZE

18 GA. Blk/Orp	Rear A.C. Light GR
18 GA. Blk/Red	Middle A.C. Light GR
OPTION	
18 GA. Blk/Ylw	Indirect Light GR
14 GA. White	Around
10 GA. Red	Main Power
18 GA. Wht/Ylw	Light Power
12 GA. Red	Rear Fan
10 GA. Wht/Red	Radio Indirect Lighter Power
14 GA. Orange	Ignition Power
14 GA. Orange	Illumination display vanity
16 GA. RED	TV C VCP Radio-Rear Antenna
18 GA. Blk/WHT	Courtesy Switch Ground
10 GA. Purple	10 GA. Red
10 GA. Wht/Red	10 GA. Orange
10 GA. Orange	10 GA. Red
10 GA. Red	10 GA. Blk/Red
10 GA. Blk/Wht	10 GA. Blk/Wht
10 GA. Wht	10 GA. Orange
10 GA. Orange	10 GA. Orange
10 GA. Red	10 GA. Red
10 GA. Blk/Wht	10 GA. Blk/Wht

10 GA. Purple

10 GA. Red

10 GA. Wht/Red

10 GA. Orange

10 GA. Red

10 GA. Blk/Red

10 GA. Blk/Ylw

10 GA. Wht

10 GA. Orange

10 GA. Orange

10 GA. Red

10 GA. Blk/Wht

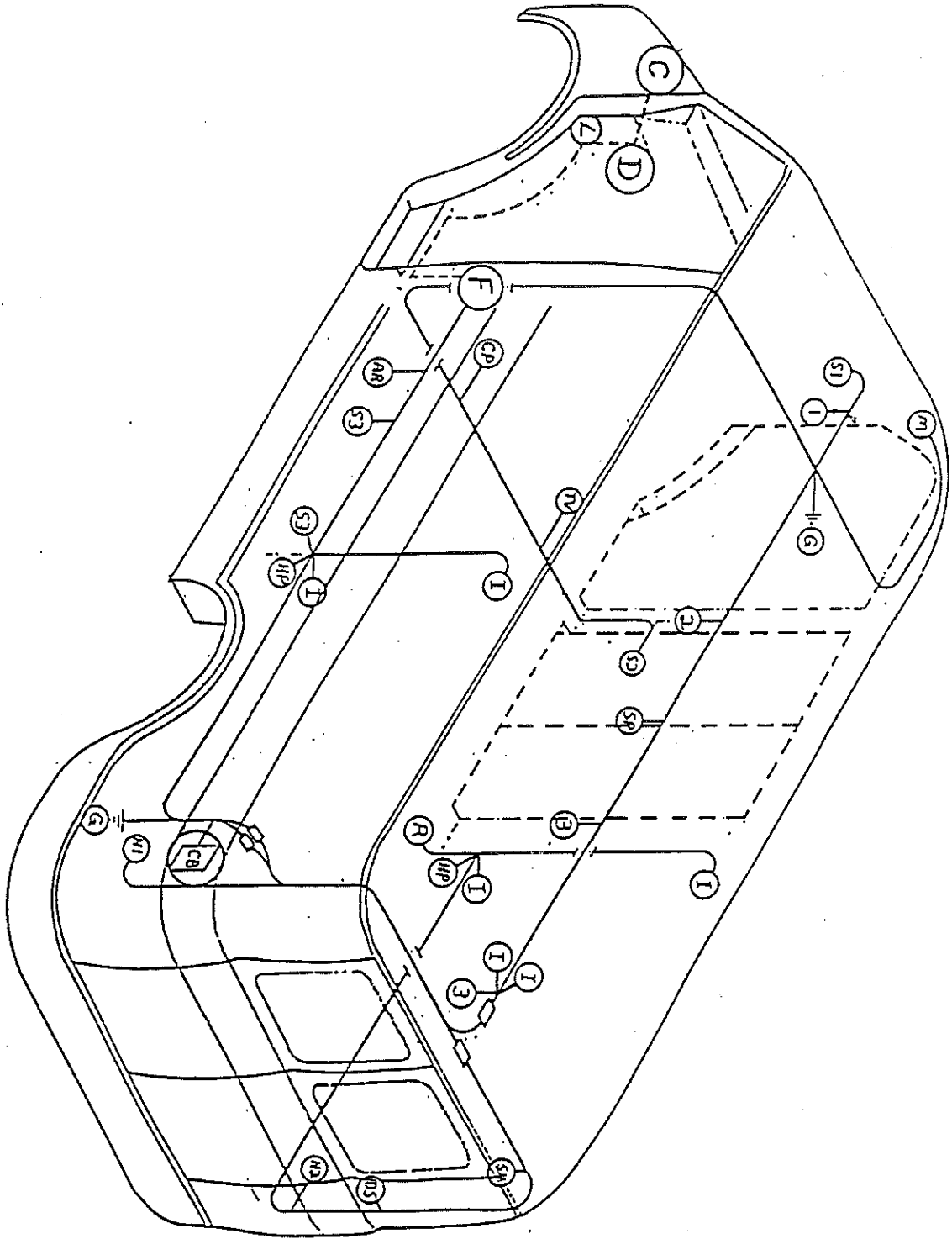
10 GA. Blk/Wht

10 GA. Wht

10 GA. Orange

10 GA. Orange

10 GA. Red



1992, 93 MULTIPLEX WIRE HARNESS LOCATION

# 1992, 93 MULTIPLEX WIRE CHART

COMPONENTS	COLOR CODING
C GM POWER SOURCE :	10 GA. RED - CONSTANT HOT (J1)
D DODGE POWER SOURCE :---	14 GA. ORANGE - IGNITION HOT (J12)
F FORD POWER SOURCE :	
S1 MASTER SWITCH PANEL	18 GA. YELLOW - IPX SIGNAL (J4) 18 GA. BROWN - IPX GROUND (J3) 14 GA. ORANGE - IGNITION HOT (J12)
S2 SIDE CARGO DOOR SWITCH PANEL	18 GA. YELLOW - IPX SIGNAL (J4) 18 GA. BROWN - IPX GROUND (J3) 14 GA. ORANGE - IGNITION HOT (J12) 18 GA. GRAY - HPX DOOR LOCK SIGNAL (S2, S4, L)
S3 REMOTE SWITCH PANEL	(SAME AS S1)
S4 POWER SOFA/DOOR LOCK SWITCH PANEL	(SAME AS S2)
1 FRONT AIRCRAFT LIGHTS	18 GA. WHITE - CONSTANT GROUND (G) 18 GA. BLACK/WHITE - COURTESY GROUND (J15) 18 GA. WHITE/YELLOW - LIGHT POWER (J6)
CENTER AIRCRAFT LIGHT	18 GA. BLACK/RED - SWITCHED GROUND (J7) 18 GA. BLACK/WHITE - COURTESY GROUND (J15) 18 GA. WHITE/YELLOW - LIGHT POWER (J6)
3 REAR AIRCRAFT LIGHTS	18 GA. BLACK/ORANGE - SWITCHED GROUND (J8) 18 GA. BLACK/WHITE - COURTESY GROUND (J15) 18 GA. WHITE/YELLOW - LIGHT POWER (J6)
I INDIRECT LIGHTS	18 GA. BLACK/YELLOW - SWITCHED GROUND (J9) 18 GA. WHITE/RED - LIGHT POWER (J11)
DS DOME SWITCH	18 GA. VIOLET - COURTESY IMPULSE (J14)
M LIGHTED VISOR VANITY MIRROR	14 GA. ORANGE - IGNITION HOT (J12) 16 GA. WHITE - CONSTANT GROUND (G)
R 12 VOLT RECEPTICAL	18 GA. WHITE/RED - POWER (J11) 18 GA. WHITE - CONSTANT GROUND (G)
HP HEADPHONE JACK	14 GA. WHITE - CHASSIS GROUND (G) 22 GA. WHITE - AUX RADIO - LEFT (AR, HP) 22 GA. BLACK - AUX RADIO - RIGHT (AR, HP) 22 GA. BLUE - TV - (TV, HP) 22 GA. GREEN - TV + (TV, HP)

COMPONENTS	COLOR CODING
TV TELEVISION	16 GA. RED - SWITCHED POWER (J5) 18 GA. WHITE - CHASSIS GROUND (G) 22 GA. ORANGE - TV SPEAKER + (TV, SP) 22 GA. BROWN - TV SPEAKER - (TV, SP) 22 GA. BLUE - TV HEADPHONE (TV, HP) 22 GA. GREEN - TV HEADPHONE (TV, HP)
AR AUXILIARY RADIO	16 GA. RED - SWITCHED POWER (J5) 18 GA. WHITE/RED - CONSTANT HOT (J11) 22 GA. BLACK - HEADPHONE - RIGHT (AR, HP) 22 GA. WHITE - HEADPHONE - LEFT (AR, HP) 14 GA. WHITE - CHASSIS GROUND (G)
SP TV REMOTE SPEAKER	22 GA. ORANGE - SIGNAL (TV, SP) 22 GA. BROWN - SIGNAL (TV, SP)
CP CELLULAR PHONE PREP (OPTIONAL)	ANTENNA LEAD, 12V POWER, CHASSIS GROUND
CB CIRCUIT BOARD FUSE BOARD	POWER DISTRIBUTION
H1 AUXILIARY HEAT & AIR POWER SOFA SOURCE FORD ONLY	12 GA. RED + 12V POWER (J10) 18 GA. YELLOW - IPX SIGNAL (J4) 18 GA. BROWN - IPX GROUND (J3) 12 GA. WHITE - CHASSIS GROUND (G)
H2 AUXILIARY HEAT & AIR POWER SOFA SOURCE GM & DODGE ONLY	SAME AS H1
G SYSTEM GROUNDS	CHASSIS GROUND
L POWER DOOR LOCK SIGNAL	18 GA. GRAY - MPX DOOR LOCK SIGNALS (S2, S4, L) 18 GA. WHITE - CHASSIS GROUND (G) 3 - FACTORY INTERFACE



18 GA. Yellow Signal

18 GA. Brown Signal Impulse

J4    J3     
 IPX SIG IAX SIG  
 GND

J0     
 LGT2

J7     
 LGT1  
 J16     
 LGT4

J9     
 LGT3

J2     
 PWR GND

J1     
 12V PWR

J6     
 LGT PWR

J10     
 REAR FAN

J11     
 AUX A

J13     
 IGN

J12     
 AUX B

J5     
 VIDEO

J15     
 LIGHTS

RELAY

MAXIMUM FUSE SIZE

FUSE INFORMATION

F2 LIGHTS. 15 AMP

F3 REAR FAN 20 AMP

F4 AUX A 15 AMP

F1 AUDIO/VIDEO 7.5 AMP

F5 AUX B 15 AMP

JP1     
 FORD  
 G.M.

J14     
 DOOR  
 SWITCH

- 14 GA. White/Blue Rear AC Light GR
- 14 GA. White/Orange Middle AC Light GR
- OPTION
- 14 GA. White/Black Indirect Light GR
- 14 GA. White Around
- 10 GA. Red Main Power
- 14 GA. Orange Light Power
- 12 GA. Red Rear Fan
- 14 GA. Red Radio Indirect Lighter Power
- 16 GA. Blue Ignition Power
- 16 GA. Blue Illumination Display Unit
- 14 GA. Brown TV/ACP Radio Power
- 18 GA. White/Green Courtesy Switching

18 GA. Green Activates dome light

MULTI-PLEX CIRCUIT BOARD  
CONVERSION CHART

1993 Circuit Board  
Pigtail Color Codes

1992 Harness  
Color Codes

=====		=====	
1. YELLOW	- - - - -	IPX SIGNAL-	- - - - - YELLOW 18 GA
2. BROWN	- - - - -	IPX GROUND-	- - - - - BROWN 18 GA
3. BLACK/ORANGE	- - - - -	MID A/C LIGHT	- - - - - BLACK/ORANGE 18 GA
4. BLACK/WHITE	- - - - -	REAR A/C LIGHT-	- - - - - BLACK/RED 18 GA
5. BLACK/YELLOW	- - - - -	INDIRECTS	- - - - - BLACK/YELLOW 18 GA
6. BLACK/RED-	- - - - -	NOT IN USE-	- - - - -
1. WHITE/YELLOW-	- - - - -	LIGHTER POWER	- - - - - WHITE/RED 18 GA
2.	- - - - -	NOT IN USE-	- - - - -
3.	- - - - -	NOT IN USE-	- - - - -
4. WHITE/RED	- - - - -	LIGHT POWER	- - - - -
5. WHITE/ORANGE-	- - - - -	NOT IN USE-	- - - - -
6.	- - - - -	NOT IN USE-	- - - - -
7. BLACK	- - - - -	CRTY SWITCH GROUND-	- - - - - BLACK/WHITE 18 GA
8. VIOLET-	- - - - -	ACTIVITIES DOME LIGHT	- VIOLET 18 GA
9. ORANGE-	- - - - -	IGNITION POWER-	- - - - - ORANGE 14 GA
10. ORANGE-	- - - - -	ILLUMINATION DISPLAY-	- ORANGE 14 GA

WHITE 14 GA GROUND

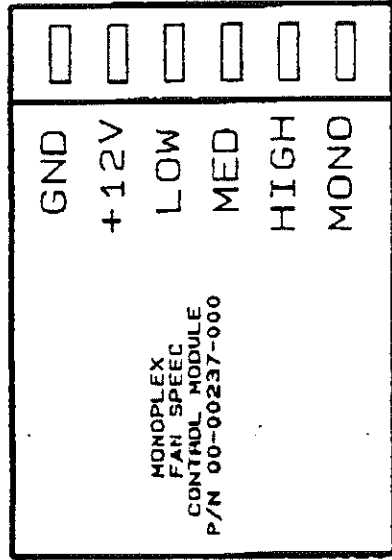
RED 10 GA MAIN POWER

RED 12 GA REAR FAN

BROWN 14 GA TV/RADIO POWER

PLUG REMAINING HARNESS WIRES  
DIRECTLY TO BOARD

- :2AUG (MIN)  
 - :8-20AUG

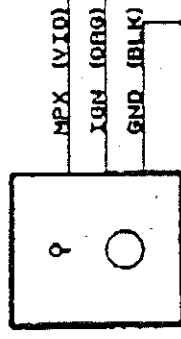


+12V BAT.

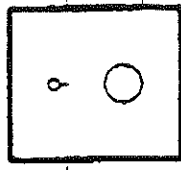
20 AMP CIRCUIT BREAKER

REAR FAN MOTOR

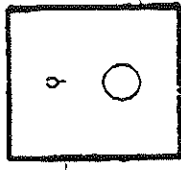
+12V SWITCHED IGNITION



STAND-ALONE  
 REAR FAN  
 SWITCH  
 P/N 00-00283-000



00-00183-021  
 OPTIONAL REAR FAN SWITCHES



00-C-0183-021  
 OPTIONAL REAR FAN SWITCHES

NOTES:

1. The rear fan will only run when +12V is applied to the "-12V SWITCHED IGNITION" input on the MPX switch.
2. Each time the switch is pressed the rear fan module steps from "off" to "high", "high" to "med", "med" to "low", and "low" to "off". The LED indicator is lit whenever power is being delivered to the rear fan motor.

INTELLITEC ELECTRICAL SYSTEMS BY BRUNSWICK  
 131 N. EISENHOWER LN  
 LOMBARD, ILLINOIS 6014E  
 (708) 238-0010  
 Title  
 WIRING DIAGRAM STANCALCIE REAR FAN SW  
 Size Document Number  
 A 53-22079-000  
 REV  
 B  
 Date: March 20, 1992 Sheet 9 of 9

