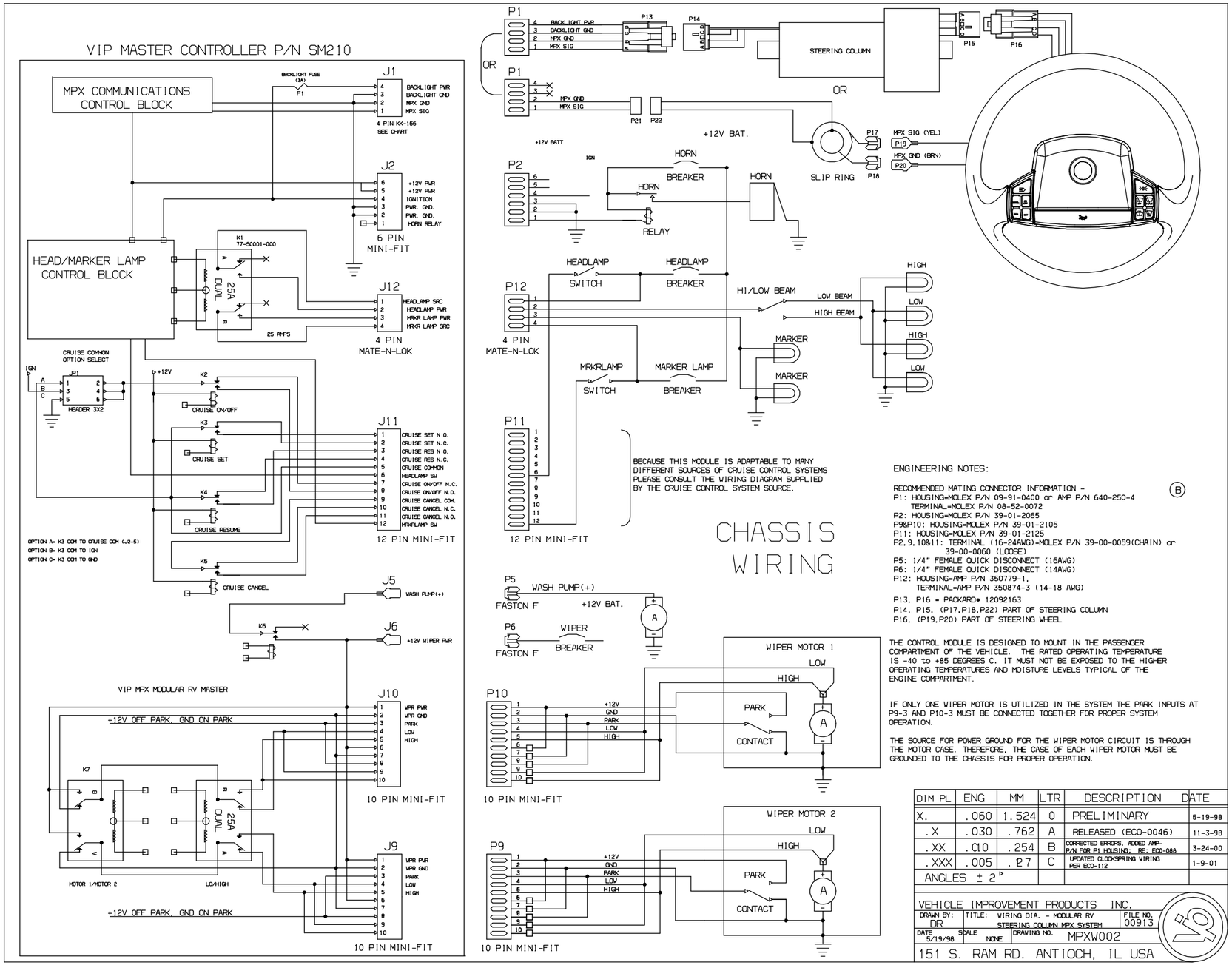
RELEASE NUMBER	REV LTR	ZONE	REVISION DESCRIPTION	BY	DATE	APPD
P20225-94	-	--	INITIAL RELEASE	TAA	05/29/03	JMD



ENGINEERING NOTES:

RECOMMENDED MATING CONNECTOR INFORMATION -
P1: HOUSING=MOLEX P/N 09-91-0400 or AMP P/N 640-250-4
TERMINAL=MOLEX P/N 08-52-0072
P2: HOUSING=MOLEX P/N 39-01-2065
P9&P10: HOUSING=MOLEX P/N 39-01-2105
P11: HOUSING=MOLEX P/N 39-01-2125
P2,9,10&11: TERMINAL (16-24AWG)=MOLEX P/N 39-00-0059(CHAIN) or 39-00-0060 (LOOSE)
P5: 1/4" FEMALE QUICK DISCONNECT (16AWG)
P6: 1/4" FEMALE QUICK DISCONNECT (14AWG)
P12: HOUSING=AMP P/N 350779-1, TERMINAL=AMP P/N 350874-3 (14-18 AWG)
P13, P16 = PACKARD® 12092163
P14, P15, (P17,P18,P22) PART OF STEERING COLUMN
P16, (P19,P20) PART OF STEERING WHEEL

(B)

THE CONTROL MODULE IS DESIGNED TO MOUNT IN THE PASSENGER COMPARTMENT OF THE VEHICLE. THE RATED OPERATING TEMPERATURE IS -40 to +85 DEGREES C. IT MUST NOT BE EXPOSED TO THE HIGHER OPERATING TEMPERATURES AND MOISTURE LEVELS TYPICAL OF THE ENGINE COMPARTMENT.

IF ONLY ONE WIPER MOTOR IS UTILIZED IN THE SYSTEM THE PARK INPUTS AT P9-3 AND P10-3 MUST BE CONNECTED TOGETHER FOR PROPER SYSTEM OPERATION.

THE SOURCE FOR POWER GROUND FOR THE WIPER MOTOR CIRCUIT IS THROUGH THE MOTOR CASE. THEREFORE, THE CASE OF EACH WIPER MOTOR MUST BE GROUNDED TO THE CHASSIS FOR PROPER OPERATION.

DIM PL	ENG	MM	LTR	DESCRIPTION	DATE
X.	.060	1.524	0	PRELIMINARY	5-19-98
.X	.030	.762	A	RELEASED (ECO-0046)	11-3-98
.XX	.010	.254	B	CORRECTED ERRORS, ADDED AMP-P/N FOR P1 HOUSING; RE: ECO-088	3-24-00
.XXX	.005	.127	C	UPDATED CLOCKSPRING WIRING PER ECO-112	1-9-01
ANGLES ± 2°					

VEHICLE IMPROVEMENT PRODUCTS INC.
DRAWN BY: DR | TITLE: WIRING DIA. - MODULAR RV STEERING COLUMN MPX SYSTEM | FILE NO. 00913
DATE 5/19/98 | SCALE NONE | DRAWING NO. MPXW002
151 S. RAM RD. ANTIOCH, IL USA

1. VENDOR: VIP
ANTIOCH, IL
VENDOR P/N: SM210

2. NOT SUBJECT TO FCCC TOLERANCES.

3. IDENTIFY COMPONENT PER FREIGHTLINER SPEC 49-00051

DELIVERY MUST CONFORM EXACTLY WITH DRAWING SPECIFICATIONS AND, WHERE REQUIRED BY Q.A., WITH APPROVED Q.A. SAMPLES. ABSOLUTELY NO CHANGES ARE PERMITTED WITHOUT PRIOR APPROVAL BY FREIGHTLINER LLC. THIS INCLUDES CHANGES TO: SOFTWARE, MATERIALS, INTERNAL COMPONENTS, MANUFACTURING PROCESSES.

FREIGHTLINER® LLC

MATERIAL APPROVAL M.PITSENBARGER	DATE 06/05/03	UNLESS OTHERWISE NOTED, DIMENSIONS AND TOLERANCES ARE DEFINED ACCORDING TO ASME STANDARD Y14.5M-1994, WITH EXCEPTIONS PER FREIGHTLINER EOSM 09E0-K17.
DRAWN BY T. ALCORN	DATE 05/29/03	
CHECKED BY E.REYNOLDS	DATE 06/03/03	THIRD ANGLE PROJECTION
RESPONSIBLE ENGINEER T. ALCORN	DATE 05/29/03	UNITS OF MEASURE MM
APPROVED BY J. DEMEZA	DATE 06/05/03	MFG ENGR/PURCH AGENT . DATE

ITEM NUMBER D06-47823-000
DESCRIPTION SCHEM-SMARTWHEEL,X
DESCRIPTION SCHEM-SMARTWHEEL,X
SUPPLEMENTARY DESCRIPTION 540B2
ITEM/DRAWING NUMBER D06-47823
REVISION LETTER -
SHEET NUMBER 1 OF 1

FPL862
.SCHEM-SMARTWHEEL.X
DRAW ID- D06-47823
DWG FILE LOC - PDX CATIA
USER ID- CATIA
SHEET FILE- BSIZ SHEET
PLOT TIME- 07:17
LAST FILE- 03/06/12 07:17
PLOT DATE- JUNE 12, 2003