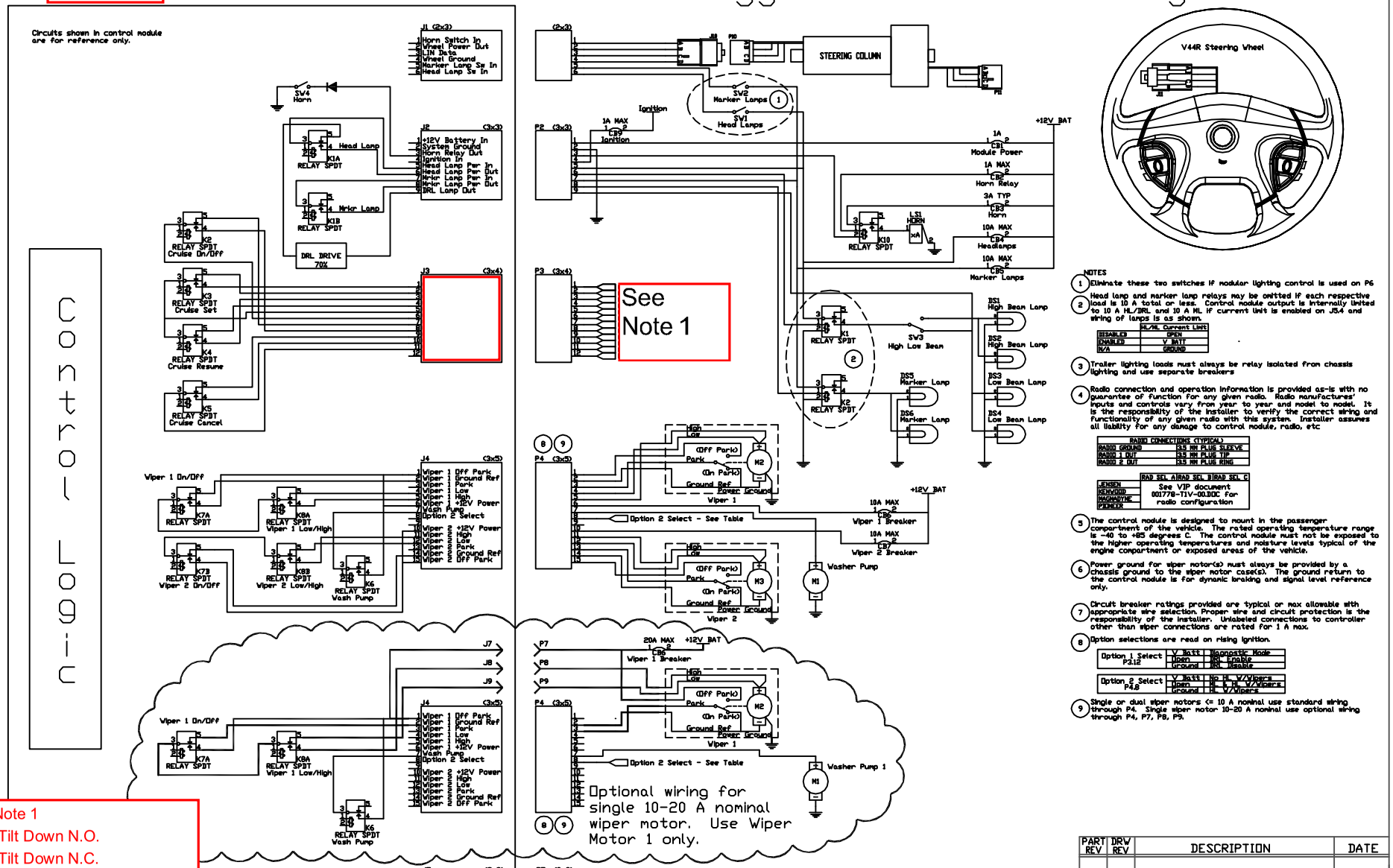
SM220 Control Module

Suggested Chassis Wiring



Note 1

1.- Tilt Down N.O.
2.- Tilt Down N.C.
3.- Telescope Up N.O.
4.- Telescope Up N.C.
5.- GND
6.- GND
7.- Tilt Up N.C.
8.- Tilt Up N.O.
9.- GND
10.- Telescope Down N.C.
11.- Telescope Down N.O.
12.- Option 1 Select - See Table

NOTES

1. Eliminate these two switches if modular lighting control is used on P6
2. Head lamp and marker lamp relays may be omitted if each respective load is 10 A total or less. Control module output is internally limited to 10 A HL/DRL and 10 A ML if current limit is enabled on J5.4 and wiring of lamps is as shown.

	HL/ML Current Limit
DISABLED	OPEN
ENABLED	V_BATT
N/A	GROUND

3. Trailer lighting loads must always be relay isolated from chassis lighting and use separate breakers
4. Radio connection and operation information is provided as-is with no guarantee of function for any given radio. Radio manufactures' inputs and controls vary from year to year and model to model. It is the responsibility of the installer to verify the correct wiring and functionality of any given radio with this system. Installer assumes all liability for any damage to control module, radio, etc

RADIO CONNECTIONS (TYPICAL)	
RADIO GROUND	3.5 MM PLUG SLEEVE
RADIO 1 OUT	3.5 MM PLUG TIP
RADIO 2 OUT	3.5 MM PLUG RING

	RAD SEL A/RAD SEL B/RAD SEL C
JENSEN KENWOOD MAGNAVOX PIONEER	See VIP document 001778-T1V-00.DOC for radio configuration

5. The control module is designed to mount in the passenger compartment of the vehicle. The rated operating temperature range is -40 to +85 degrees C. The control module must not be exposed to the higher operating temperatures and moisture levels typical of the engine compartment or exposed areas of the vehicle.
6. Power ground for wiper motor(s) must always be provided by a chassis ground to the wiper motor case(s). The ground return to the control module is for dynamic braking and signal level reference only.
7. Circuit breaker ratings provided are typical or max allowable with appropriate wire selection. Proper wire and circuit protection is the responsibility of the installer. Unlabeled connections to controller other than wiper connections are rated for 1 A max.
8. Option selections are read on rising ignition.

Option 1 Select P3.12	
V_Batt	Magnostic Mode
Open	HL Enable
Ground	HL Disable

Option 2 Select P4.8	
V_Batt	No HL W/Wipers
Open	HL & HL W/Wipers
Ground	HL W/Wipers

9. Single or dual wiper motors <= 10 A nominal use standard wiring through P4. Single wiper motor 10-20 A nominal use optional wiring through P4, P7, P8, P9.

PART REV	DRW REV	DESCRIPTION	DATE
A	D	Radio Table - Note 4 moved	08-05-2010
A	C	Revise P2.7, P2.8 wiring	06-06-2008
A	B	Revise Note 2, J5.4	05-01-2008
A	A	Release	04-23-2008

DIM PL	ENG	MM
X.	.060	1.524
.X	.030	.762
.XX	.010	.254
.XXX	.005	.127
ANGLES ± 2°		

THIS DRAWING AND ITS INFORMATION IS CONFIDENTIAL. IT IS THE PROPERTY OF VIP INC. AND MUST NOT BE MADE PUBLIC OR USED IN ANY WAY DETRIMENTAL TO THE INTERESTS OF VIP INC.

VEHICLE IMPROVEMENT PRODUCTS INC.

DRAWN BY	TITLE	FILE NO.
DK	WIRING DIAGRAM, SM213	01778
DATE 02-15-2008	SCALE NONE	DRAWING NO. MPXW008
SIZE C	ANTIOCH, IL USA (847)-395-7250	