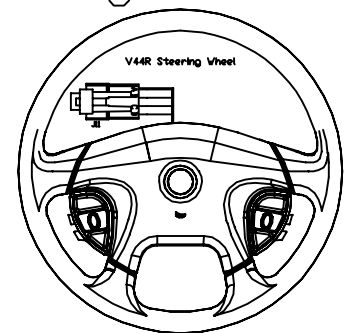
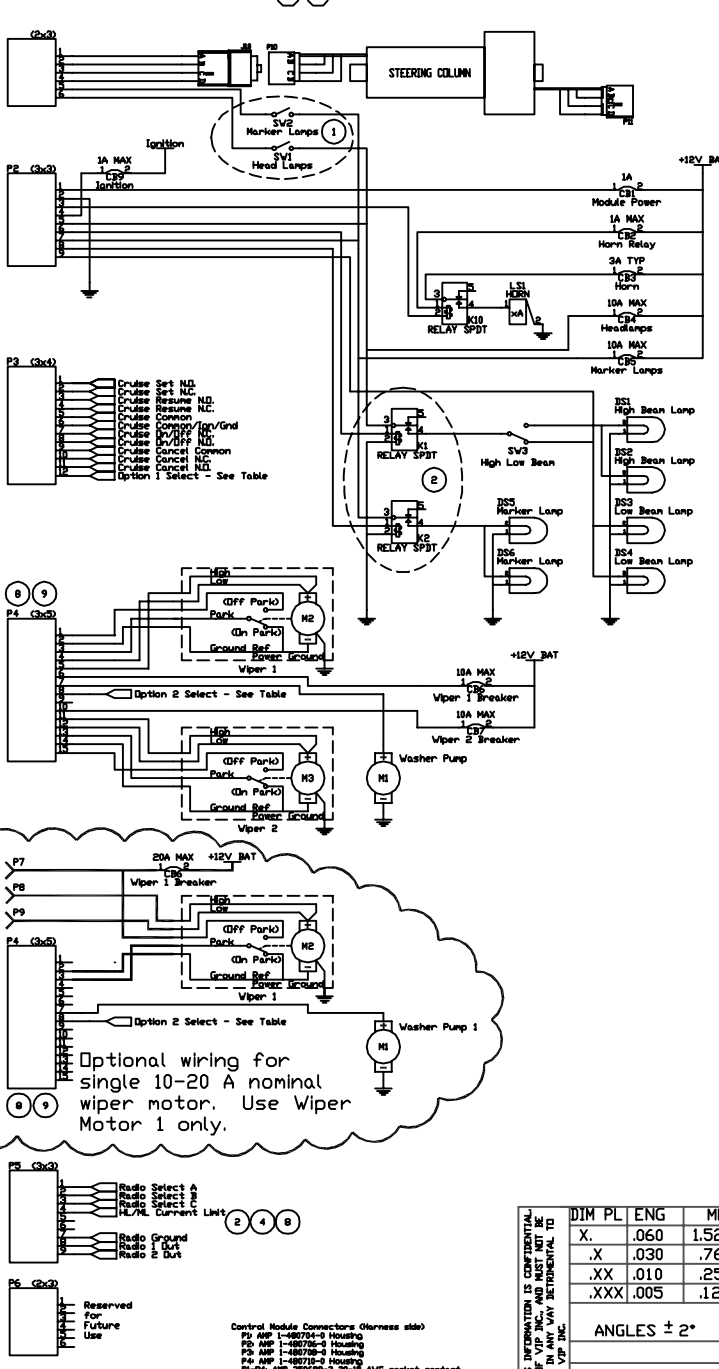
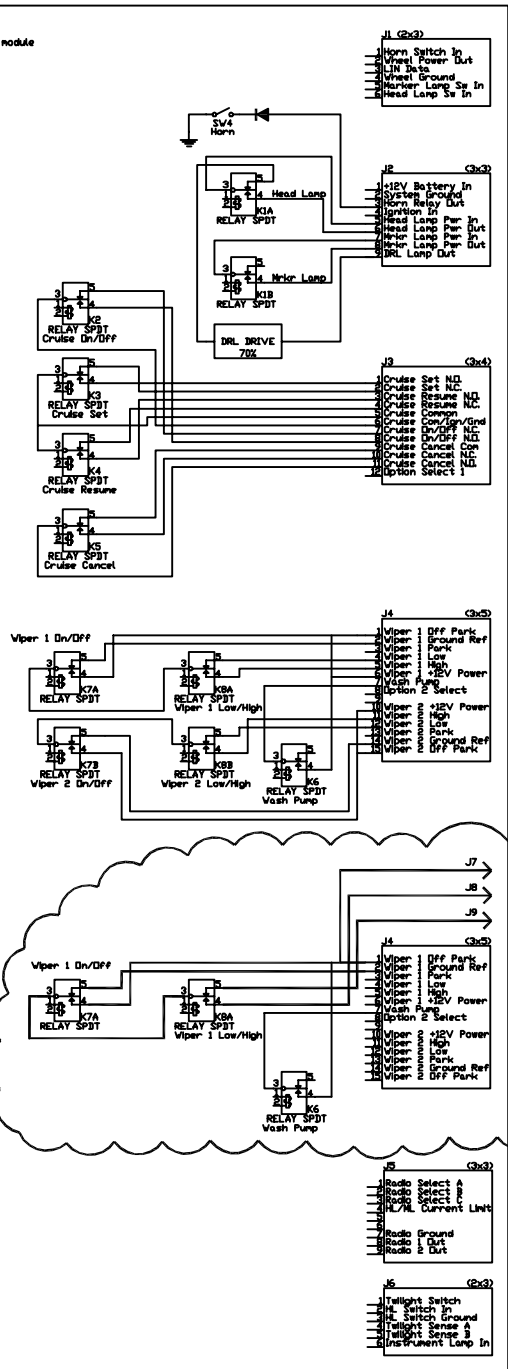


SM213 Control Module

Suggested Chassis Wiring

Circuits shown in control module are for reference only.

CONTROL MODULE



- NOTES**
- Eliminate these two switches if nodular lighting control is used on P6
 - 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/BLL and 10 A HL if current limit is enabled on J5.4 and wiring of lamps is as shown.
 - Trailer lighting loads must always be relay isolated from chassis lighting and use separate breakers
 - Radio connection and operation information is provided as-is with no guarantee of function for any given radio. Radio manufacturers' 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.
 - 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.
 - 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.
 - 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 after connections are rated for 1 A max.
 - Option selections are read on rising ignition.
 - 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.

RELAY	CURRENT LIMIT
RELAY 1	10 A
RELAY 2	10 A
RELAY 3	10 A
RELAY 4	10 A

RADIO GROUND	WIPER PLUS SHELVES
RELAY 1	RELAY 1
RELAY 2	RELAY 2

LEADER	WIPER 1	WIPER 2	WIPER 3	WIPER 4
REARWARD	001778-TIV-0010DC	001778-TIV-0010DC	001778-TIV-0010DC	001778-TIV-0010DC
FORWARD	001778-TIV-0010DC	001778-TIV-0010DC	001778-TIV-0010DC	001778-TIV-0010DC

Option 1 Select	V INSET	Ignition Mode
P4.12	Ignition	Ignition
P4.12	Ignition	Ignition

Option 2 Select	V INSET	High/Low	Wiper	Wiper
P4.12	Ignition	High/Low	Wiper	Wiper
P4.12	Ignition	High/Low	Wiper	Wiper

Optional wiring for single 10-20 A nominal wiper motor. Use Wiper Motor 1 only.

PART REV	DESCRIPTION	DATE

DIM	PL	ENG	MM
X.	.060	1.524	
.X	.030	.762	
.XX	.010	.254	A D Radio Table - Note 4 moved
.XXX	.005	.127	A C Revise P2.7, P2.8 wiring

ANGLES ± 2°	A B	A Release
	08-05-2010	06-06-2008
	05-01-2008	04-23-2008

VEHICLE IMPROVEMENT PRODUCTS INC.

DRAWN BY: DK TITLE: WIRING DIAGRAM, SM213 FILE NO: 01778

DATE: 02-15-2008 SCALE: NONE DRAWING NO: MPXW008

SIZE: c ANTIOCH, IL USA (847)-395-7250

Control Module Connectors (Glossary side)
 P2 AMP 1-48721-3 Housing
 P3 AMP 1-48721-3 Housing
 P4 AMP 1-48721-3 Housing
 P5 AMP 1-48721-3 Housing
 P6 AMP 255489-3 SP-38 AVS socket contact
 P7, P8, P9 1251-1 Housing
 P8 Typo 172169-1
 P9 Typo 172169-1
 P5-P6 Typo 77098-1 22 AVS socket contact
 P7, P8, P9 1251-1 Insulated female quick disconnect, 20 Amp
 COLUMN CONNECTOR
 J10 PACCARD 1829163 Housing
 PACCARD 1829163 AVS 20 Terminal

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