

# AXLE RATIO

Programming axle ratio is only required after physically changing the gears in the differentials. There is no performance increase by adjusting this value to anything besides what the vehicle has physically installed. Programming the incorrect ratio will cause some vehicles to go into "Limp-In" mode.

1



Set the first 3 DIP switches as shown.

2



Set the last 6 based on preferred axle ratio using the chart below.



3.07 : 1

3.21 : 1



3.55 : 1

3.73 : 1



4.10 : 1

4.56 : 1



4.88 : 1

5.13 : 1



5.38 : 1

5.67 : 1

# VIN RELEASE

1



Set the first 3 DIP switches as shown.

This mode will restore all settings to their original values and release the VIN locked in the Procal for use in another vehicle.

# OPTIONS

1



Set the first 3 DIP switches as shown.

2a

## ONE-TOUCH LANE CHANGE



Set switches as noted above & the last 4 based on the chart below.



ON

OFF

2b

## DAYTIME RUNNING LAMPS



Set switches as noted above & the last 4 based on the chart below.



LOW BEAMS  
ON

HIGH BEAMS  
ON

TURN SIGNALS  
ON

FOG LIGHTS  
ON



EUROPEAN  
ON

OFF

By design, the Daytime Running Lamps will only function with the E-Brake in the OFF position and the vehicle in gear (auto trans only). To verify the function is correct and desired mode is set, pull the vehicle up to a reflective surface or have a by-stander verify function. Please take caution to keep the vehicle under control at all times

2c

## AUTO SWAY BAR SYSTEM



Set switches as noted above & the last 4 based on the chart below.



ON

OFF

# ENGINE FUNCTIONS

The functions SET PEDAL and SET VIN are for new installs of the AEW JK Hemi Conversion vehicles only. Failure to correctly finish these functions could leave the vehicle in a temporarily inoperable condition. If the vehicle currently runs, these functions should not be executed.

1



Set the first 3 DIP switches as shown.

2



Set the last 6 based on preferred axle ratio using the chart below.



SET PEDAL

SET VIN



CLEAR DTC CODES

# RUNTIME FUNCTIONS

Runtime functions do not program any values and require the Procal to remain plugged in during their use.

1



Set the first 3 DIP switches as shown.

2



Set the last 6 based on preferred axle ratio using the chart below.



EXTENDED IDLE

CENTER STEERING

\*The engine must be running with the E-brake engaged before inserting the Procal. Use the dimmer switch to adjust idle set point.



**PROCAL**  
**MODULE**  
QUICK REFERENCE GUIDE

# INSTRUCTIONS

(Store this Quick Reference Guide with the Owner's Manual for future use)

## PROGRAMMING FUNCTIONS

Set the dip switches according to this Quick Reference Guide and, with the engine off and ignition on to the RUN position, plug the module into the OBD port. The RUN position is two "clicks" in with the key, all the lights on the cluster should be on in RUN mode. The horn will sound twice when the programming has been successfully completed. After the horn sounds, remove the Procal and cycle the ignition off and then on again.

## RUNTIME FUNCTIONS

Set the dip switches according to this Quick Reference Guide and with the conditions in the user guide met, plug the module into the OBD port. Some functions will require special conditions like the e-brake to be set and/or the engine running before plugging the Procal in for example.

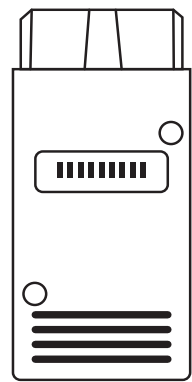
## USER GUIDE

Please consult the User Guide for detailed information regarding each mode and troubleshooting.

## ONLINE DOCUMENTATION

Digital versions of this Quick Reference Guide and the Procal Module User Guide are available online at:

[www.aev-conversions.com/education/installation-guides](http://www.aev-conversions.com/education/installation-guides)



Dip switch settings in this guide assume the Procal Module is held in this position.

**UP**



**EXAMPLE:**



up, down, up, down, down...

## TIRE SIZES 24"-38"



Set the first 3 DIP switches as shown.



Enter your exact tire measurement to the closest .25 inch

\_\_\_\_\_ . \_\_\_\_\_  
A B

34.75" TIRE EXAMPLE: A = 34 B = .75



Using the A value from step 2, use the chart below to set the next 4.

24	25	26	27
28	29	30	31
32	33	34	35
36	37	38	



Using the B value from step 2, use the chart below to set the last 2.

.00	.25	.50	.75

## TIRE SIZES 39"-54"



Set the first 3 DIP switches as shown.



Enter your exact tire measurement to the closest .25 inch

\_\_\_\_\_ . \_\_\_\_\_  
A B

44.75" TIRE EXAMPLE: A = 44 B = .75



Using the A value from step 2, use the chart below to set the next 4.

39	40	41	42
43	44	45	46
47	48	49	50
51	52	53	54



Using the B value from step 2, use the chart below to set the last 2.

.00	.25	.50	.75

## LOW TIRE PRESSURE THRESHOLD



Set the first 3 DIP switches as shown.



Use the chart below to set the next 6 for your preferred tire pressure threshold.

22 PSI	23 PSI	24 PSI
25 PSI	26 PSI	27 PSI
28 PSI	29 PSI	



**DISABLING TPMS\***



\* Setting the TPMS to a disabled value is for diagnostic purposes only, see User Guide for details. This option may be restricted in some areas.