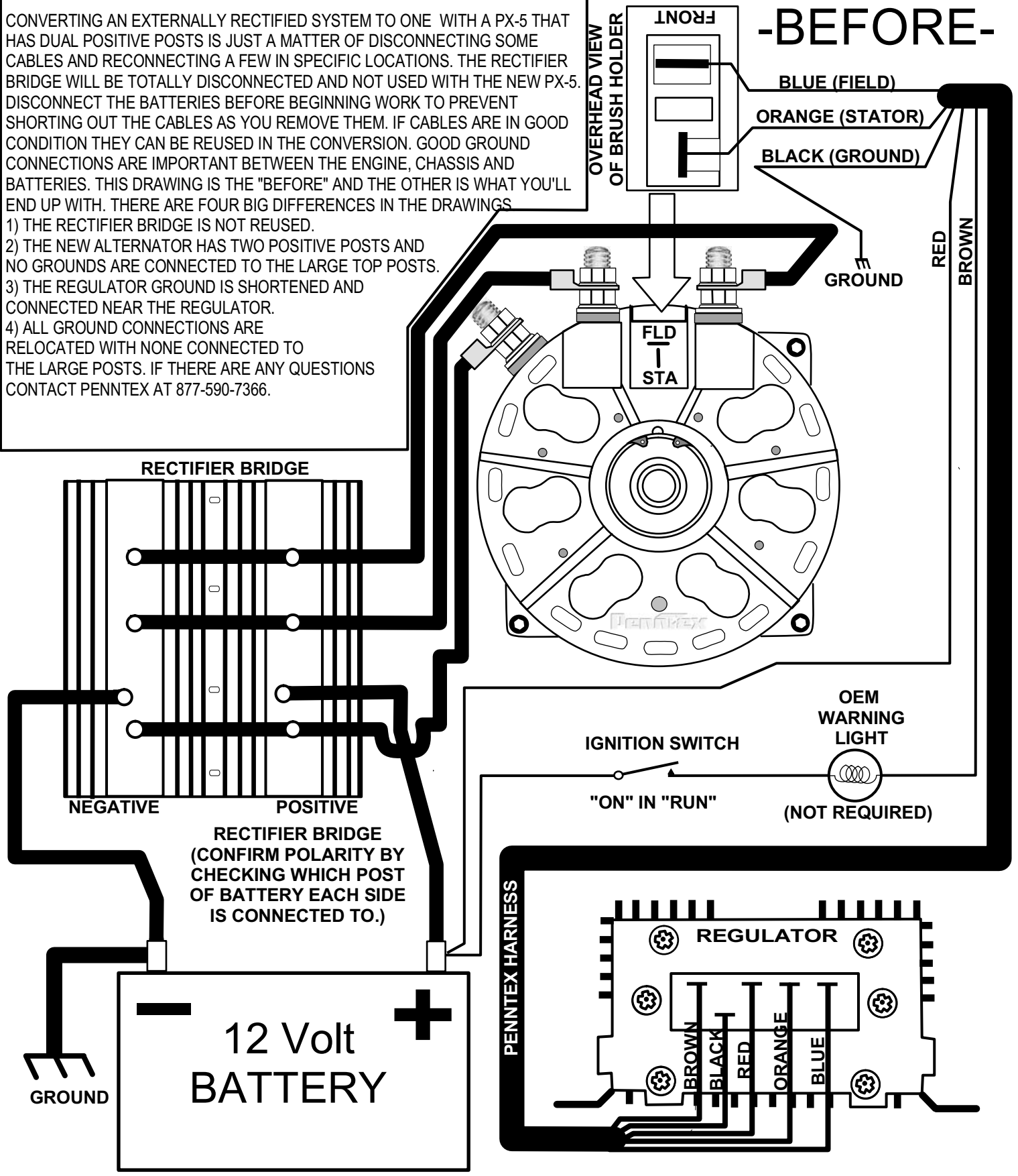


CONVERTING AN EXTERNALLY RECTIFIED SYSTEM TO ONE WITH A PX-5 THAT HAS DUAL POSITIVE POSTS IS JUST A MATTER OF DISCONNECTING SOME CABLES AND RECONNECTING A FEW IN SPECIFIC LOCATIONS. THE RECTIFIER BRIDGE WILL BE TOTALLY DISCONNECTED AND NOT USED WITH THE NEW PX-5. DISCONNECT THE BATTERIES BEFORE BEGINNING WORK TO PREVENT SHORTING OUT THE CABLES AS YOU REMOVE THEM. IF CABLES ARE IN GOOD CONDITION THEY CAN BE REUSED IN THE CONVERSION. GOOD GROUND CONNECTIONS ARE IMPORTANT BETWEEN THE ENGINE, CHASSIS AND BATTERIES. THIS DRAWING IS THE "BEFORE" AND THE OTHER IS WHAT YOU'LL END UP WITH. THERE ARE FOUR BIG DIFFERENCES IN THE DRAWINGS

- 1) THE RECTIFIER BRIDGE IS NOT REUSED.
- 2) THE NEW ALTERNATOR HAS TWO POSITIVE POSTS AND NO GROUNDS ARE CONNECTED TO THE LARGE TOP POSTS.
- 3) THE REGULATOR GROUND IS SHORTENED AND CONNECTED NEAR THE REGULATOR.
- 4) ALL GROUND CONNECTIONS ARE RELOCATED WITH NONE CONNECTED TO THE LARGE POSTS. IF THERE ARE ANY QUESTIONS CONTACT PENNTEX AT 877-590-7366.

-BEFORE-



NOTES: THIS IS A GENERIC WIRING SCHEMATIC FOR A PX-2, 4, & 5 ALTERNATOR WITH EXTERNAL RECTIFICATION BEFORE CONVERSION TO A PX-5 ALTERNATOR WITH DUAL POSITIVE POSTS
CHARGING CABLE SIZE: #2 AWG

PennTex
INDUSTRIES, INC.
FT. WORTH, TX MANCHESTER, PA
877-590-7366 penntexusa.com

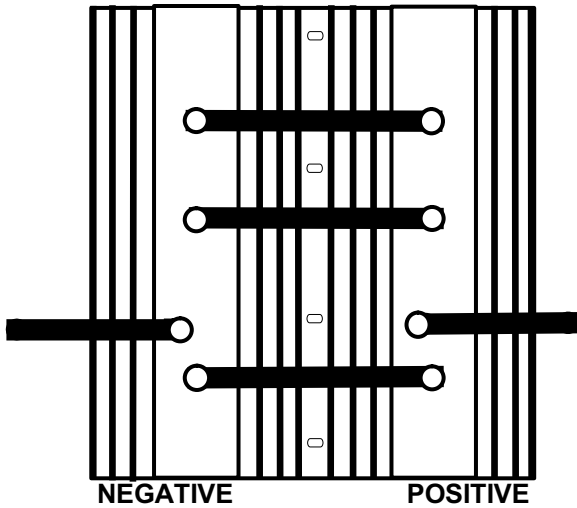
TITLE/DESC. PX-2,4,&5 EXTERNALLY RECTIFIED BEING CONVERTED TO PX-5 DUAL POSITIVE POST		
DATE: 03-16-2011	DRAWING NUMBER:	
REVISION #	DRAWN BY: DMc	CHECKED BY:
SCALE: NONE		PAGE: 1 OF 1

MODELS PX-5GD, PX-5PD,
PX-5P2D, OR PX-5RD:
CONNECT ANY ALTERNATOR
GROUND CABLE TO
ALTERNATOR MOUNTING
OR BRACKET BOLT OR
GOOD ENGINE GROUND.
THE PX-5TD HAS A GROUND
ATTACHMENT LOCATION.

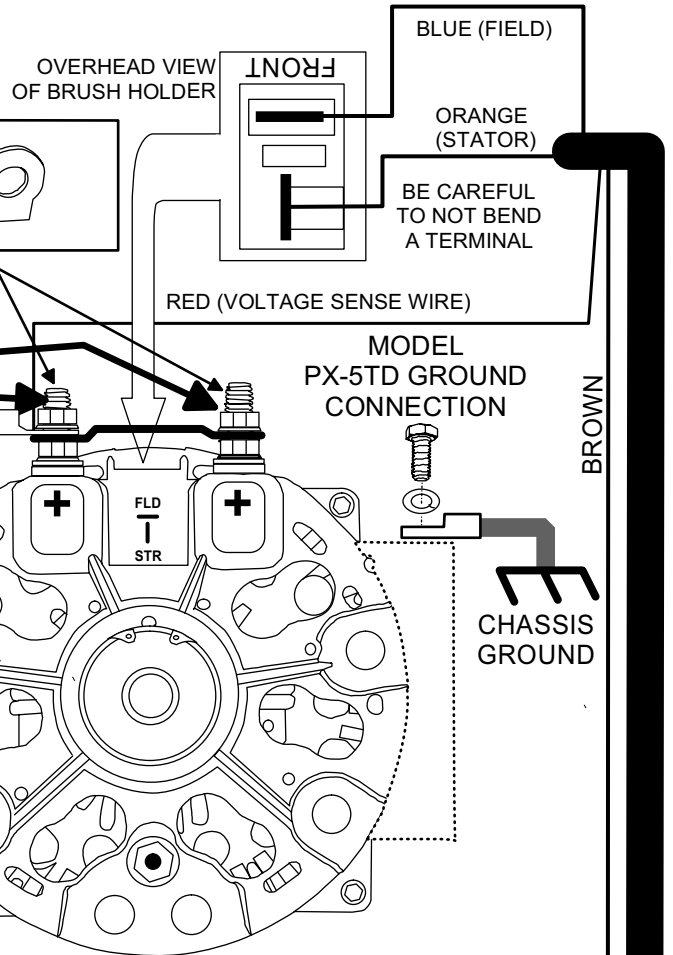
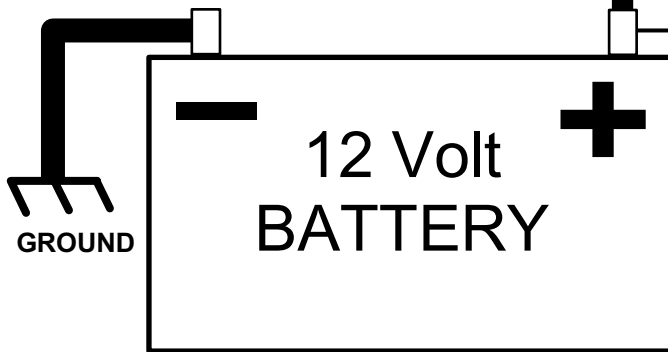
BOTH POSITIVE

CABLES IN GOOD CONDITION
CAN BE REUSED TO
COMPLETE THE CONVERSION

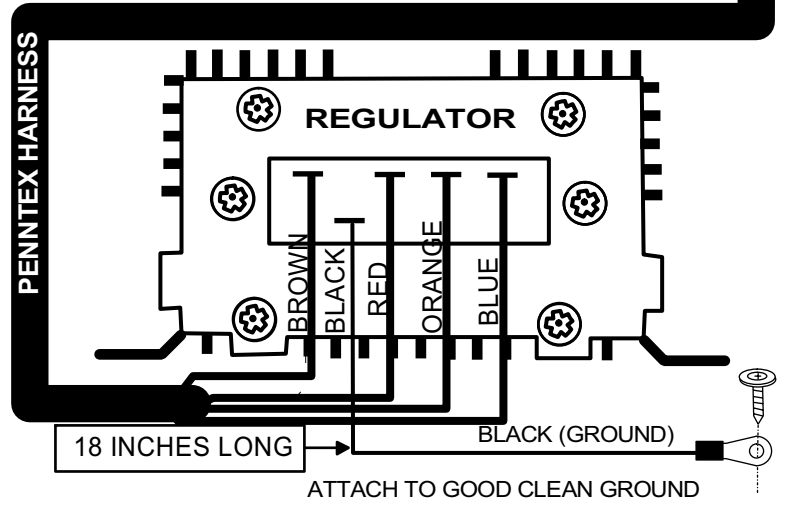
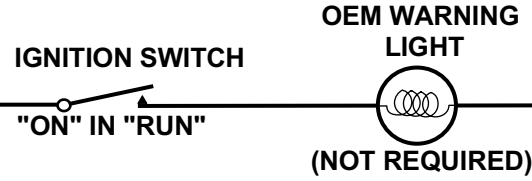
RECTIFIER BRIDGE
NOT USED



MAKE SURE AFTER THE CONVERSION
THAT THERE ARE LARGE CABLES
CONNECTING THE ENGINE, CHASSIS
AND BATTERY FOR A GOOD GROUND



THE REGULATOR GROUND IS SHORTENED TO
18 INCHES AND RELOCATED NEAR THE REGULATOR



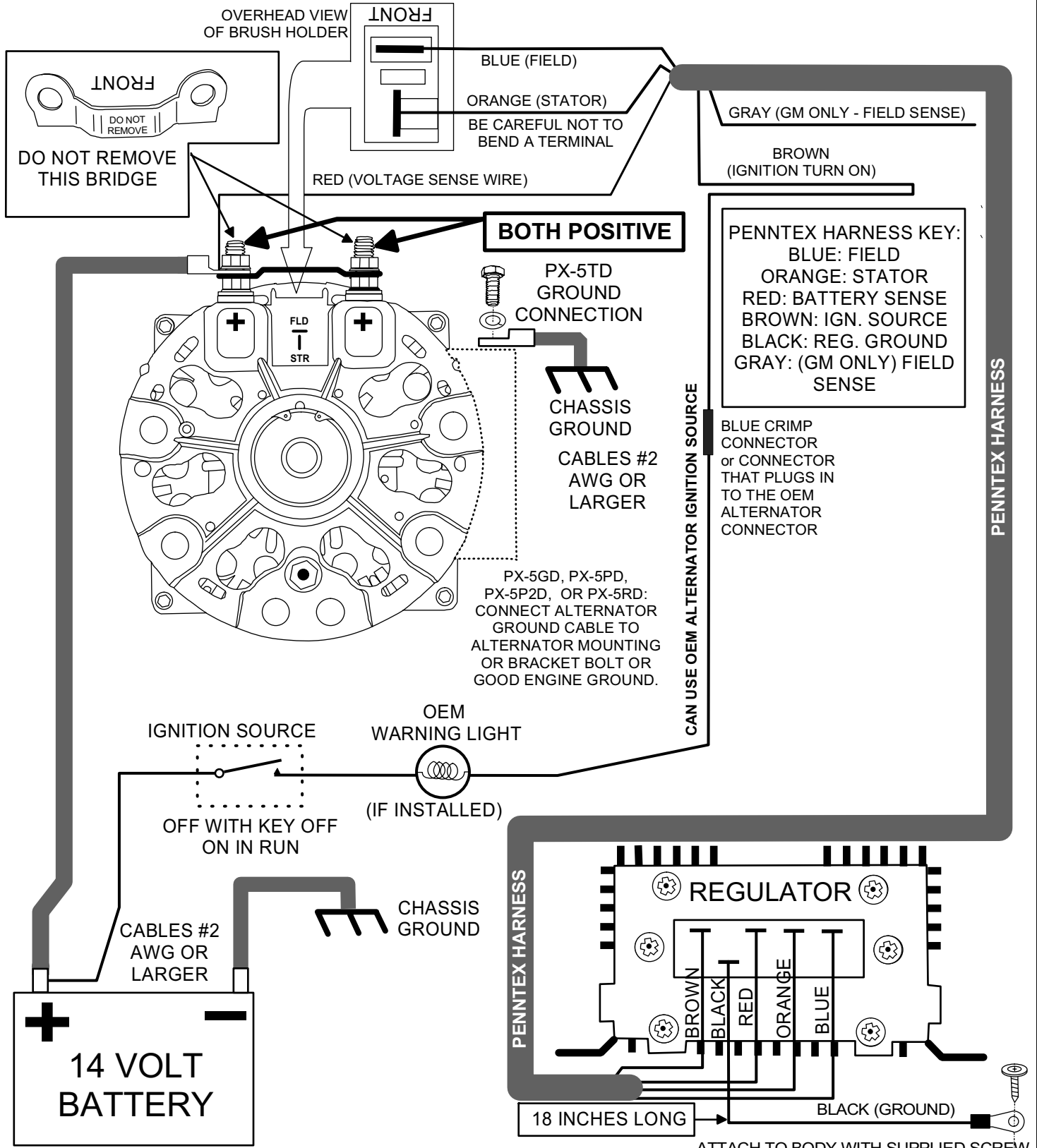
NOTES: THIS IS A GENERIC WIRING
SCHEMATIC FOR A PX-2, 4, & 5
ALTERNATOR WITH EXTERNAL
RECTIFICATION CONVERTED TO
A PX-5 ALTERNATOR WITH DUAL
POSITIVE POSTS
CHARGING CABLE SIZE: #2 AWG

PennTex
INDUSTRIES, INC.
FT. WORTH, TX MANCHESTER, PA
877-590-7366 penntexusa.com

TITLE/DESC.
PX-2,4,&5 EXTERNALLY RECTIFIED
CONVERTED TO PX-5 DUAL POSITIVE POST

DATE: 03-16-2011	DRAWING NUMBER:	
REVISION #	DRAWN BY: DMc	CHECKED BY:
SCALE: NONE		PAGE: 1 OF 1

PX-520_D & PX525_D
ALTERNATORS



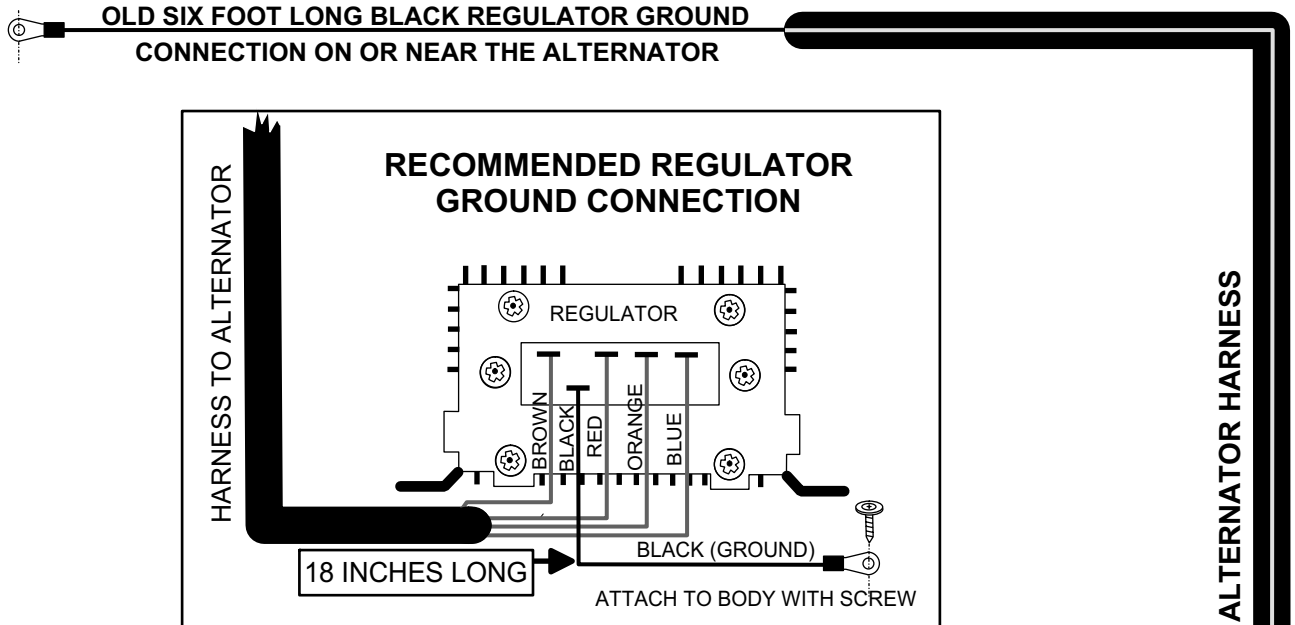
NOTES: THIS IS A GENERIC WIRING SCHEMATIC FOR THE PX-520_D AND PX-525_D ALTERNATORS WITH A PX-4000 REGULATOR. THIS IS NOT SPECIFIC TO ANY CERTAIN MAKE, MODEL, OR ENGINE.
CHARGING CABLE SIZE: MINIMUM #2 AWG OR LARGER

PennTex
INDUSTRIES, INC.
FT. WORTH, TX MANCHESTER, PA
877-590-7366 www.penntexusa.com

TITLE/DESC. GENERIC WIRING DIAGRAM FOR PX-520_D or 525_D ALTERNATOR WITH PX-4000 REGULATOR		
DATE: 12-15-09	DRAWING NUMBER:	
DRAWN BY: DMc	REVISION:	CHECKED BY:
SCALE: NONE		PAGE: 1 OF 1

RECOMMENDED CHANGE ON ANY PRE-2007 VEHICLE WITH A PENNTEX ALTERNATOR

THE PENNTEX REGULATOR GROUND WIRE ATTACHMENT LOCATION HAS CHANGED.



PennTex changed the ground wire hook-up for our regulator harnesses in 2007. A 6-foot long ground wire from the regulator to the alternator has been superseded by a shorter 18-inch regulator ground wire with a self-tapping screw to attach the ground wire ring terminal. This is intended to be a vehicle body ground, closer to the regulator and independent from the alternator ground.

This change is a result of continued difficulties with good alternator-to-chassis grounding on new OEM and Aftermarket installations, and especially on older buses that have developed poor cable connections from age or insufficient maintenance practices. Providing a separate ground connected to the vehicle body will help prevent regulation system damage or malfunction due to poor ground situations, which will decrease vehicle downtime.

If you have any questions, please contact our technical department at 877-590-7366 or by email at tech@penntexusa.com. Thank you for using PennTex products.

