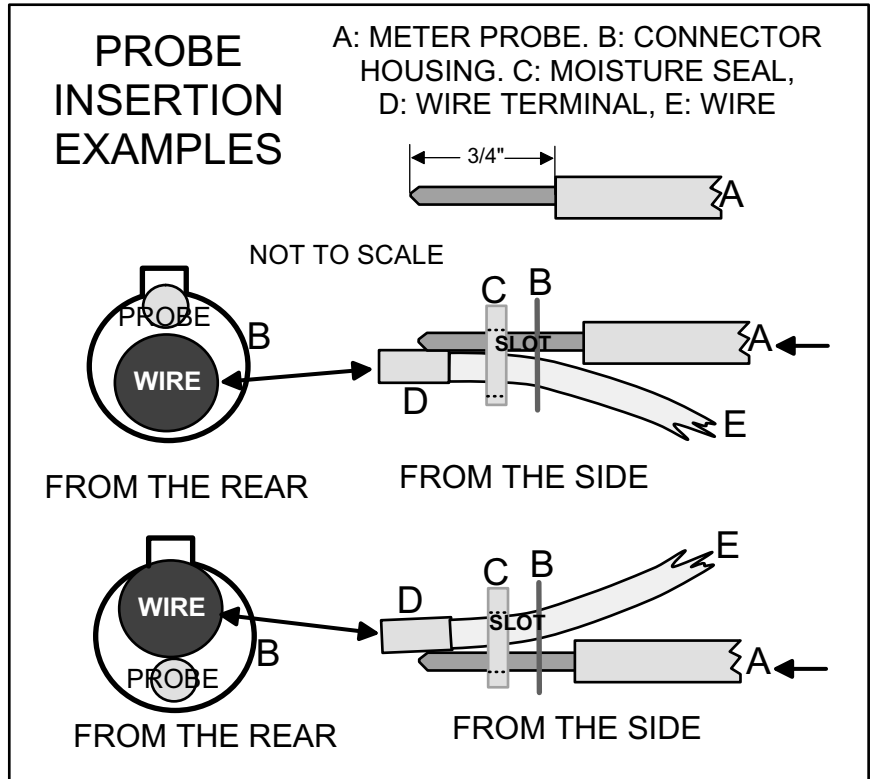
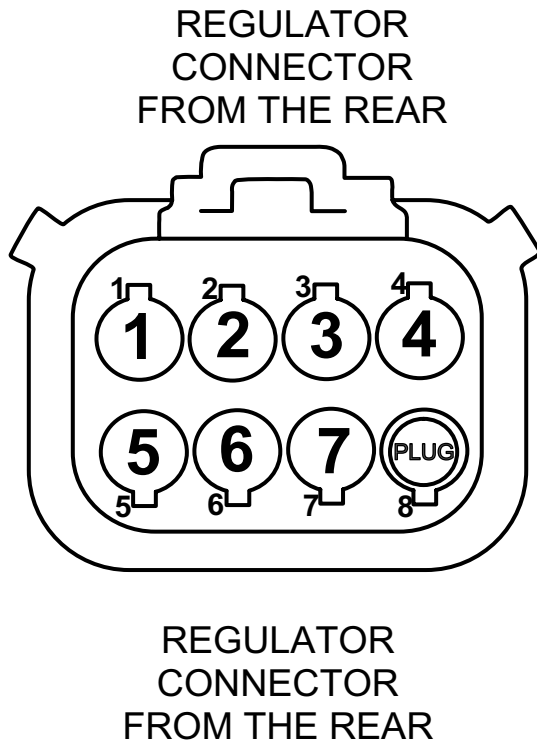


TESTING A PENNTEX CHARGING SYSTEM WITH A PX-7000 VOLTAGE REGULATOR

The standard PennTex 4-Step Voltage Test has been revised for PX-7000 voltage regulators. The regulator may have to be taken loose from the vehicle for access to the regulator connector. Voltage readings for the tests can be taken by firmly inserting a digital voltmeter positive probe into the wire holes in the back of the regulator connector. There is a moisture seal inside the connector that each wire passes through before coming out of the back of the connector. If the meter probe is inserted through the same hole that the wire passes through the seal will not be damaged.



The connector moisture seal is the same shape as the rear of the connector housing. It has eight holes and is about 1/8" thick. Inserting a meter probe will stretch the seal hole but it will regain its previous shape. There are 3 steps to getting good probe/wire terminal contact: **1)** Have the regulator where the connector is accessible. **2)** Line the positive meter probe (A) up with the wire. **3)** Slide the probe firmly through the connector (B) along the wire until about 1/2" of the probe is inside the connector. You may have to move the probe in and out just a little to get probe/wire terminal contact. The best wire to get a feel for how this works is wire #1 (large Red). Have the meter turned on with a good ground for the negative probe, and the meter set to DC Volts. There should be voltage on wire #1 all of the time. Follow this 3-step procedure to get a meter reading and it will be easier to do the other wires.

PX-7000 WIRE CONNECTOR COLORS AND LOCATIONS

- | | |
|--------------|-------------------------|
| 1: Large Red | 5: Small Red |
| 2: Orange | 6: Blue with Red Stripe |
| 3: Blue | 7: Purple |
| 4: Black | 8: Plug/no wire |

PennTex
INDUSTRIES, INC.
 FT. WORTH, TX MANCHESTER, PA
 TOLL FREE: WEB SITE:
 877-590-7366 www.penntexusa.com
 DRAWING BY DMc UPDATED 12-10-08

CHARGING SYSTEM TEST FOR VEHICLES WITH A PX-7000 REGULATOR

Your Company Name: _____

Testers Name: _____

Phone: _____ Ext: _____

Alternator Model Number: _____

Alternator Serial Number: _____

PX-7000 Serial Number: _____

Vehicle Mileage: _____

Vehicle Year: _____ Make: _____ Engine: _____



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TOLL FREE: WEB SITE:
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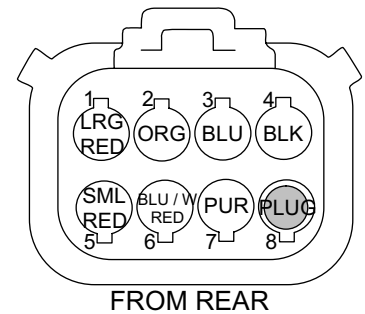
Warranty Flat Rate Schedule
(If Warranty Verified)
-Test Charging System using this form: 1/2 (.5) Hour
-R&R Alternator: 1.0 Hour
-R&R Regulator: 1/2 (.5) Hour
-Any additional time is not payable by PennTex Industries, Inc.

Your Shop Hourly Labor Rate:
\$ _____

Locate the external voltage regulator, make sure that everything is properly connected and that the charging system harness has a good ground.
Complete the following chart using a digital volt meter set on the DC Volts scale.

VOLTAGE READINGS

Regulator Terminals ↓	Test # 1 Ignition Off Engine Off	Test # 2 Ignition On Engine Off	Test # 3 Ignition On Engine On	Test # 4 Ignition On High Idle
Field Terminal (Blue Wire) # 3				
Stator Terminal (Orange) # 2				
Power Terminal (Large Red) #1				
Voltage At The Battery				



**PX-7000
CONNECTOR
WIRE COLORS
AND LOCATIONS:**

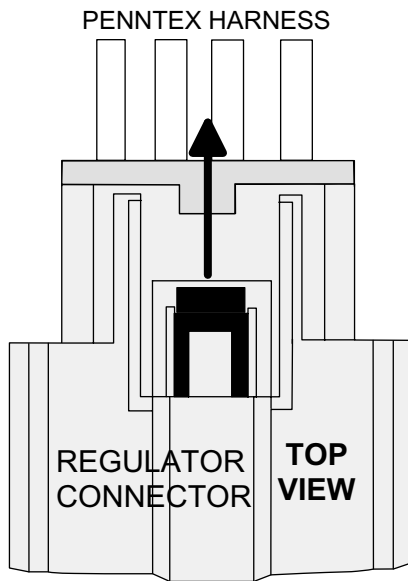
- 1: Large Red
- 2: Orange
- 3: Blue
- 4: Black
- 5: Small Red
- 6: Blue with Red Stripe
- 7: Purple
- 8: Plug/no wire

When this test is completed fax it and the Full-Field Test to 817-590-0398.
We will review it and contact you.

PennTex INDUSTRIES, INC.

PX-7000 REGULATOR FULL-FIELD TEST

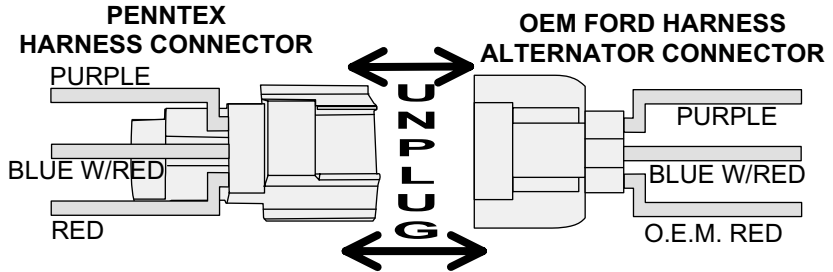
PX-4000, PX-5000, AND PX-6000 REGULATORS USE A DIFFERENT TEST



TO REMOVE CONNECTOR FROM REGULATOR
PUSH BLACK TAB DOWN AND PULL
CONNECTOR AWAY FROM REGULATOR

IMPORTANT!!! **THE PENNTEX HARNESS PLUGS INTO THE 3-WIRE OEM ALTERNATOR CONNECTOR. UNPLUG THAT CONNECTOR BEFORE DOING THE FULL-FIELD TEST**

WHEN DISCONNECTING THESE PLUGS LOOK FOR LOOSE TERMINALS

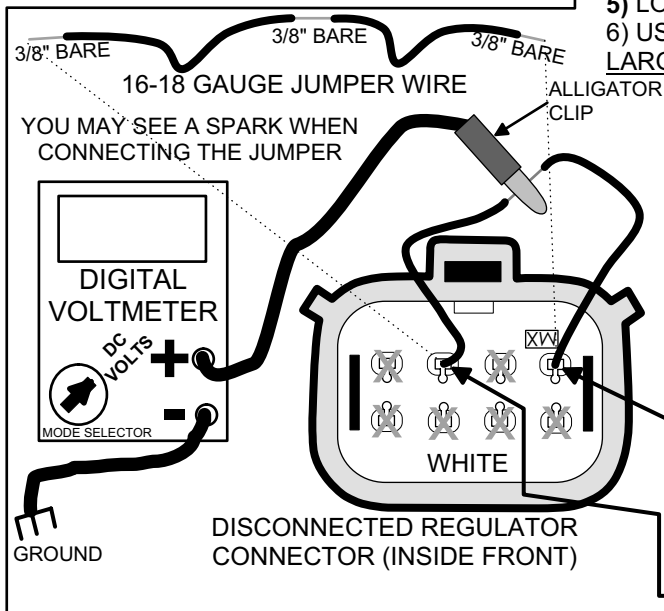


- 1) DISCONNECT THESE CONNECTORS
- 2) CHECK THE VOLTAGE AT THE O.E.M. RED WIRE TERMINAL
- 3) DO FULL THE FIELD TEST

FULL-FIELD TEST PROCEDURE:

- 1) TURN OFF ALL ACCESSORIES.
- 2) DISCONNECT THE PENNTEX HARNESS 3-WIRE CONNECTOR AT THE OEM ALTERNATOR PLUG. **DO NOT OMIT THAT STEP!!**
- 3) WITH THEM UNPLUGGED, CHECK THE VOLTAGE ON THE RED WIRE IN THE OEM FORD 3-WIRE CONNECTOR.
- 4) THAT VOLTAGE IS: _____.
- 5) LOCATE & DISCONNECT THE VOLTAGE REGULATOR.
- 6) USING A 16-18 GA. WIRE, JUMP THE SOLID BLUE AND LARGE RED WIRE TERMINALS AS SHOWN TO THE LEFT.
- 7) START THE VEHICLE; RUN AT IDLE.
- 8) CHECK THE VOLTAGE AT THE JUMPER WIRE.
- 9) THAT VOLTAGE IS: _____.
- 10) RAISE ENGINE RPM TO 1000 RPM.
- 11) CHECK THE VOLTAGE AT THE JUMPER WIRE.
- 12) THAT VOLTAGE IS NOW: _____.
- 13) SHUT THE ENGINE OFF.
- 14) REMOVE THE JUMPER WIRE.
- 15) RECONNECT THE 3-WIRE CONNECTORS.

NOTE: DO NOT RUN THE ENGINE MORE THAN 30 SECONDS IN FULL-FIELD MODE. DAMAGE TO THE VEHICLE ELECTRICAL SYSTEM COULD RESULT.



JUMP FROM **LARGE RED WIRE** LOCATION ONLY
TO SOLID BLUE WIRE LOCATION

NOTE: USING A JUMPER ON ANY OTHER COMBINATION OF WIRES MAY CAUSE ELECTRICAL DAMAGE
A FULL-FIELD TEST DETERMINES IF AN ALTERNATOR WILL CHARGE WITH THE
REGULATOR BYPASSED. AFTER COMPLETING THIS TEST AND THE FOUR-STEP
VOLTAGE TEST, FAX THEM TO OUR TECHNICAL DEPARTMENT AT 817-590-0398.
WE WILL CONTACT YOU WITH THE RESULTS.

PENNTEX INDUSTRIES, INC. TECH LINE: 877-590-7366 FAX: 817-590-0398

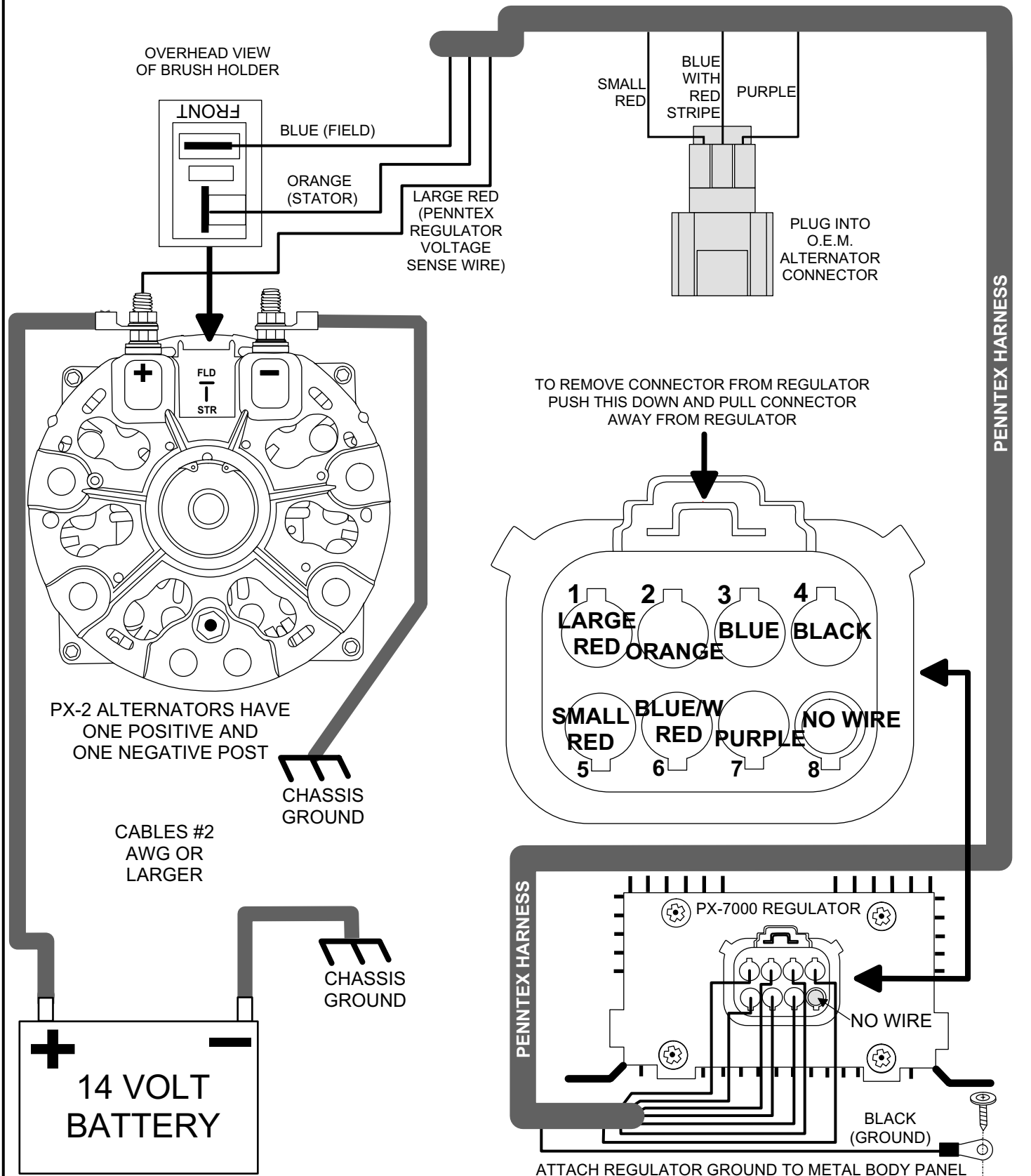
SCALE: NONE

tech@penntexusa.com

05-08-11



PX-220RC-A & PX220RC-T ALTERNATORS



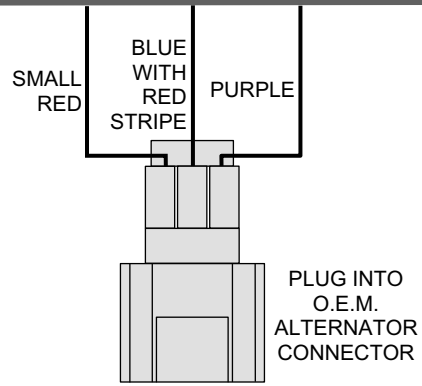
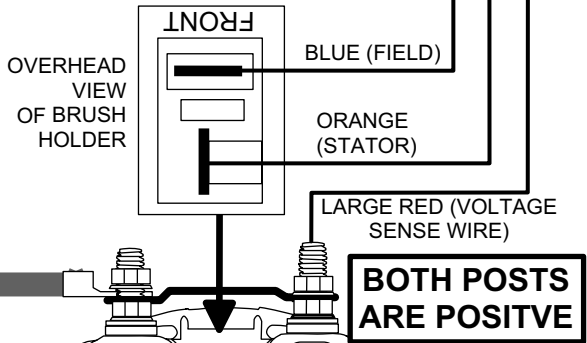
NOTES: THIS IS A GENERIC WIRING SCHEMATIC FOR THE PX-220RC-A AND PX-220RC-T ALTERNATORS WITH A PX-7000 REGULATOR. THIS IS NOT SPECIFIC TO ANY CERTAIN MAKE, MODEL, OR ENGINE.
 CHARGING CABLE SIZE: MINIMUM #2 AWG OR LARGER

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INDUSTRIES, INC.

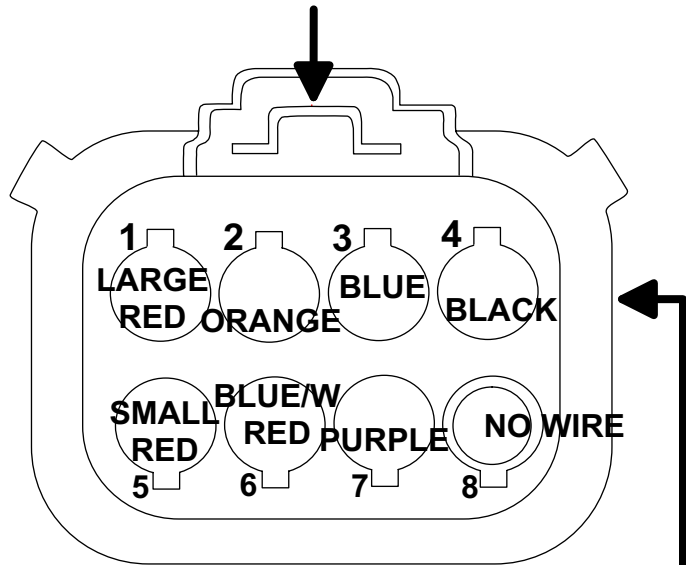
FT. WORTH, TX MANCHESTER, PA
 877-590-7366 www.penntexusa.com

TITLE/DESC. GENERIC WIRING DIAGRAM FOR PX-220RC-A or 220RC-T ALTERNATOR WITH PX-7000 REGULATOR		
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DRAWN BY: DMc	REVISION:	CHECKED BY:
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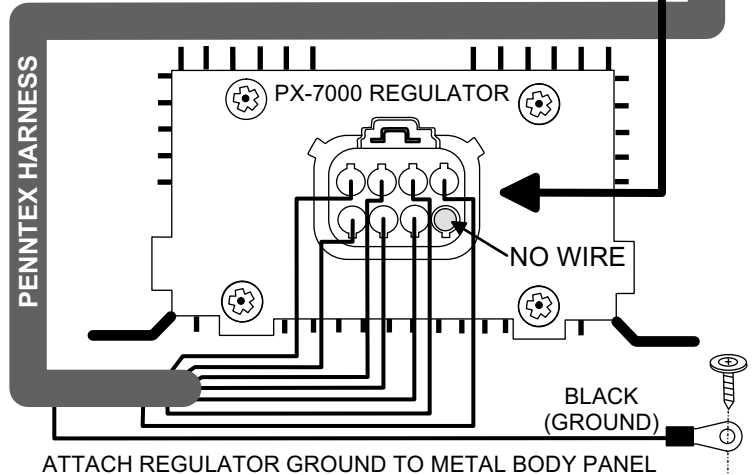
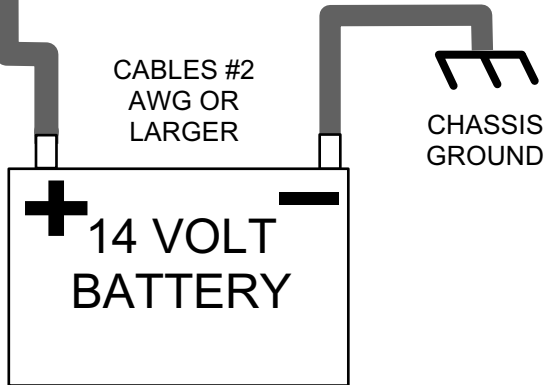
PX-520RDC & PX-525RDC ALTERNATORS



TO REMOVE CONNECTOR FROM REGULATOR
PUSH THIS DOWN AND PULL CONNECTOR AWAY FROM REGULATOR



ALTERNATOR CASE GROUNDS TO THE BRACKET OR ENGINE



PENNTEx HARNESS

NOTES: THIS IS A GENERIC WIRING SCHEMATIC FOR THE PX-520RDC AND PX-525RDC ALTERNATORS WITH A PX-7000 REGULATOR. THIS IS NOT SPECIFIC TO ANY CERTAIN MAKE, MODEL, OR ENGINE.
CHARGING CABLE SIZE: MINIMUM #2 AWG OR LARGER

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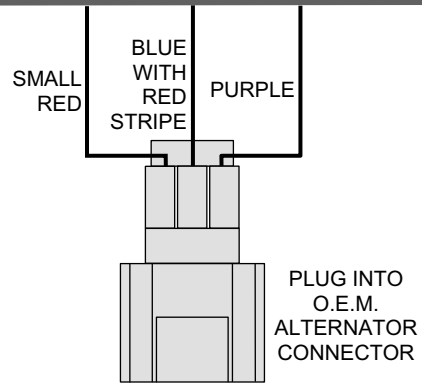
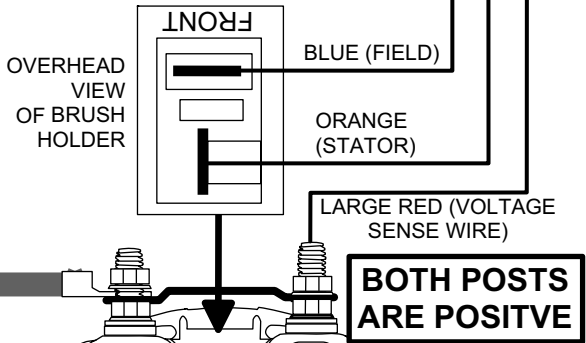
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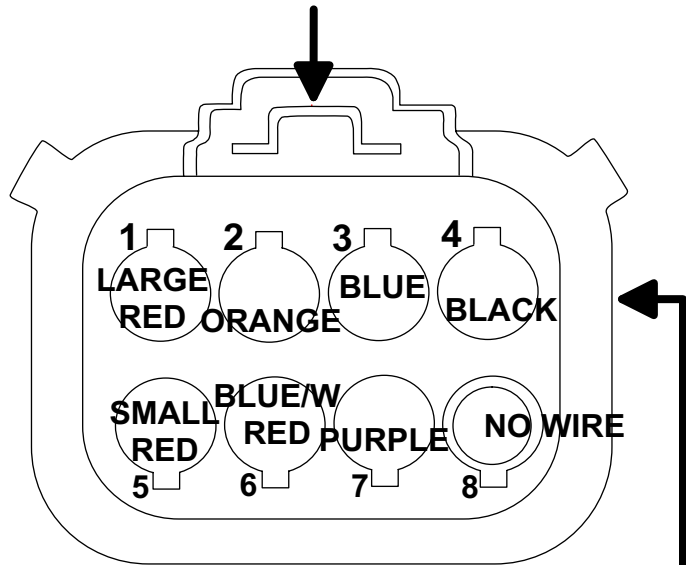
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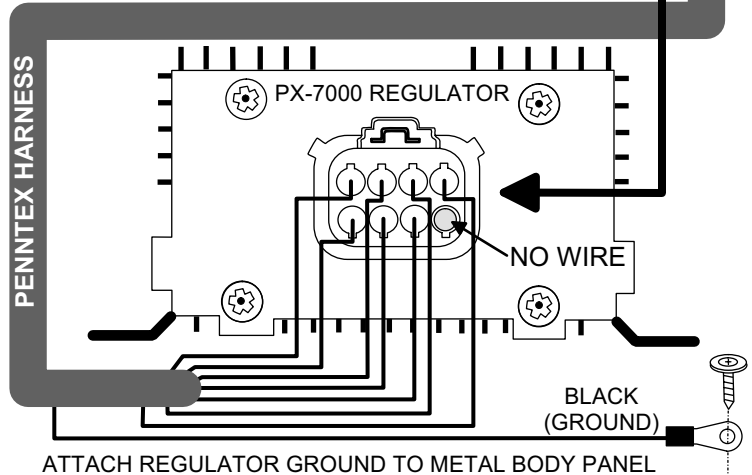
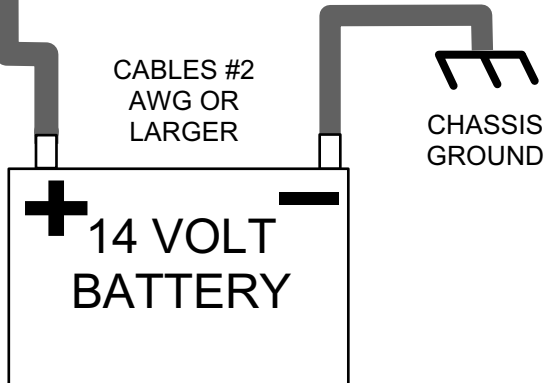
PX-723RDC & PX-725RDC ALTERNATORS



TO REMOVE CONNECTOR FROM REGULATOR
PUSH THIS DOWN AND PULL CONNECTOR
AWAY FROM REGULATOR



ALTERNATOR CASE GROUNDS
TO THE BRACKET OR ENGINE



NOTES: THIS IS A GENERIC WIRING SCHEMATIC FOR THE PX-723RDC AND PX-725RDC ALTERNATORS WITH A PX-7000 REGULATOR. THIS IS NOT SPECIFIC TO ANY CERTAIN MAKE, MODEL, OR ENGINE.
CHARGING CABLE SIZE:
MINIMUM #2 AWG OR LARGER

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877-590-7366 www.penntexusa.com

TITLE/DESC. GENERIC WIRING DIAGRAM FOR 2009-UP FORD PX-723-RDC or PX-725RDC ALTERNATOR WITH PX-7000 REGULATOR

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DRAWN BY: DMc	REVISION:	CHECKED BY:

SCALE: NONE

PAGE:
1 OF 1