

# CHARGING SYSTEM TEST FOR VEHICLES WITH A PX-4024 24-VOLT REGULATOR

Your Company Name \_\_\_\_\_

Contact Name \_\_\_\_\_

Phone \_\_\_\_\_ Ext. \_\_\_\_\_

Fax \_\_\_\_\_

Alternator Model # \_\_\_\_\_

Alternator Serial # \_\_\_\_\_

Regulator Model # \_\_\_\_\_

Regulator Serial # \_\_\_\_\_

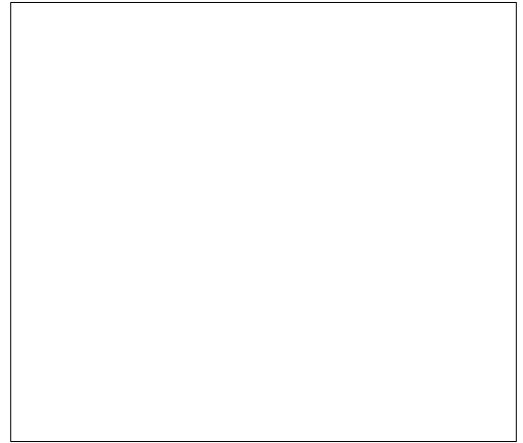
Vehicle Mileage \_\_\_\_\_

Vehicle Year \_\_\_\_\_ Make \_\_\_\_\_ Engine \_\_\_\_\_

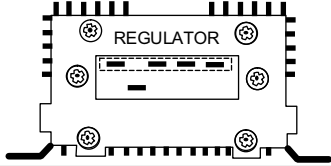
Vehicle In-Service Date: \_\_\_\_\_



Technical Support Toll Free 1-877-590-7366  
 Technical Support Fax 1-817-590-0398  
 www.penntexusa.com



IF YOUR REGULATOR HAS DIFFERENT CONNECTIONS THAN THIS, CONTACT PENNTEX FOR A DIFFERENT TEST.



The regulator is usually located inside the vehicle under the right side of the dash or behind the unused passenger-side airbag panel.

Locate the external voltage regulator. Make sure that everything is properly connected and that the regulator has a good ground. Starting with Test # 1 using a digital voltmeter, check the voltage at each terminal and write the voltage in the box. Do the same with tests 2, 3 & 4.

DO THE 4-STEP TEST WITH EVERYTHING PLUGGED IN

Ground Terminal:  
 \_\_\_\_\_ ohms

# of Batteries:  
 \_\_\_\_\_

Engine Idle :  
 \_\_\_\_\_ rpm

Engine High Idle:  
 \_\_\_\_\_ rpm

<u>Regulator Terminals</u> ↓	<u>Test # 1</u> Ignition Off Engine Off	<u>Test #2</u> Ignition On Engine Off	<u>Test # 3</u> Ignition On Engine On	<u>Test #4</u> Engine On High Idle
Field Terminal (Blue Wire) "F"	_____ volts	_____ volts	_____ volts	_____ volts
Stator Terminal (Orange Wire) "S"	_____ volts	_____ volts	_____ volts	_____ volts
Sense Terminal (Red Wire) "A"	_____ volts	_____ volts	_____ volts	_____ volts
Ignition Terminal (Brown Wire)	_____ volts	_____ volts	_____ volts	_____ volts
Battery Terminal	_____ volts	_____ volts	_____ volts	_____ volts

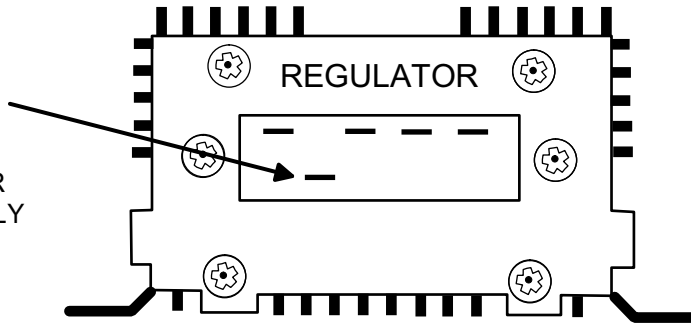
# PennTex

INDUSTRIES, INC.

PX-4024 24-VOLT REGULATOR

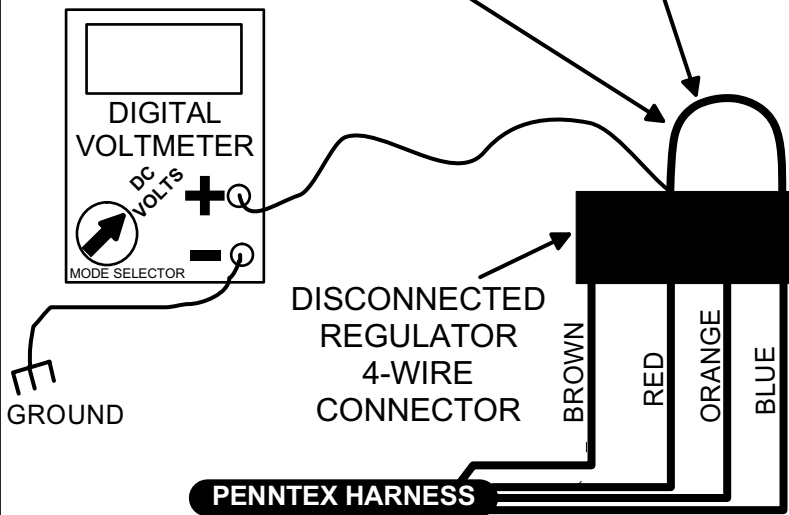
## FULL-FIELD TEST

THIS IS A GROUND TERMINAL. DO NOT CONNECT POWER TO THIS TERMINAL OR THE REGULATOR WILL BE PERMANENTLY DAMAGED.



THESE REGULATORS ARE MANUFACTURED IN OUR FT. WORTH, TX PLANT.

YOU MAY SEE A SPARK WHEN CONNECTING THE JUMPER



### FULL-FIELD TEST PROCEDURE:

- 1) TURN OFF ALL ACCESSORIES
- 2) LOCATE THE VOLTAGE REGULATOR
- 3) **DISCONNECT THE 4-WIRE CONNECTOR**
- 4) JUMP BLUE AND RED WIRES
- 5) START VEHICLE; RUN AT IDLE
- 6) AFTER IT RUNS FOR 15 SECONDS, CHECK VOLTAGE AT RED WIRE
- 7) THAT VOLTAGE IS: \_\_\_\_\_
- 8) RAISE ENGINE RPM TO 1000 RPM
- 9) CHECK VOLTAGE AT RED WIRE
- 9) THAT VOLTAGE IS NOW: \_\_\_\_\_
- 10) SHUT ENGINE OFF
- 11) REMOVE JUMPER WIRE

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

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.

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

FAX: 817-590-0398

tech@penntexusa.com