

# **KTM EXC-R PLUG AND PLAY DC CONVERSION**

## **SUMMARY & BENEFITS:**

• This installation is applicable to Trail Tech HID headlight installation, as well as general DC conversions.

• Install Stator (and flywheel) before completing these wiring instructions

- The reg/rec has a new wire to bypass the AC stator connection to the stock wiring harness.
- The DC jumper is used to provide DC power to the stock wiring harness.

#### **BENEFITS**:

- No cutting or splicing required. Makes a clean installation using factory KTM connectors.
- The installation is completely reversible.

#### PARTS:

The Reg/Rec provided has an optional relayed 12VDC circuit. The Red/Yellow lead pictured right, can be used to power any accessory during motor operation, & can be adjusted to provide power for 30-45 seconds after the motor is shut off. Optionally seal off this Red/Yellow wire and follow the standard installation instructions for the SR-8313 stator kit. Note: The Red/



REGULATOR/RECTIFIER

Yellow wire is not required to complete the installation of the SR-8313 kit!



DC JUMPER

## **INSTALLATION:**





#### STEP 1:

- **1A.** Remove the fuse (located under the seat, near the battery)
- **1B.** Locate the stock reg/rec underneath the tank.
- 1C. Remove the 8mm bolt holding the stock reg/rec.
- 1D. Disconnect the 4-pin connector



**STEP 2:** Install regulator/rectifier using stock 8mm bolt.



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# **INSTALLATION CONTINUED:**



**STEP 3:** Locate the stock 2-pin DC connector behind the headlight. Disconnect the 2-pin connector.



**STEP 4:** Install DC jumper between stock 2-pin connectors. Route spade connector from DC jumper down right side of frame with stock wire bundle. Cross to the right side of the frame with the spade connecor (near regulator/rectifier.) **STEP 5:** Re-install the fuse removed during Step 1A.

# VIEW OF FINISHED INSTALLATION:



# TRAIL TECH **4-STK KTM ELECTRICAL SYSTEMS**

# STEP 1: INSTALL STATOR AND/OR FLYWHEEL:

## **INSTALL STATOR** (AND/OR FLYWHEEL)

STATOR INSIDE SIDE CASE



FOR MOST KTM, SIMPLY REPLACE THE STOCK STATOR AND/OR FLYWHEEL.

- 1. Turn off gas, remove seat and fuel tank.
- 3. Disconnect fuse (e-start models only.) (Check fuse if bike won't start at the end.)
- 4. Drain oil from engine case; then lay bike on its side.
- 5. Remove shifter to allow for easy removal of side case.
- 6. Remove side case, exposing the stator and flywheel.
- 7. Uninstall stock stator. (4-stk 2000-09 stators are mounted to the side case.)
- 8. Clean side case and bolts thoroughly, remove any dirt or pieces of gasket.

9. Install Trail Tech stator, opposite of the removal process. Use factory torque specifications and bolts. (Use Loctite at your own risk, it may make future stator removal difficult or impossible.)

10. If installing a flywheel, a model-specific flywheel puller is required. An air-ratchet is recommended for flywheel removal (1/2" impact wrench.) Tighten to manufacturer specification (do not use an impact wrench to tighten, damage may occur to flywheel or crankshaft. Trail Tech is not liable for damage due to incorrect installation.)

11. Reinstall side case and tighten bolts to factory torgue specification. Use a new

- gasket if the original one has torn or become damaged.
- 12. Reinstall shifter and stand the bike up.

13. If you have drained the oil make sure to refill the bike to manufacturer specified level before operation.



#### MODEL-SPECIFIC NOTES



#### 4-STROKE SXF / SMR

These KTM's come stock with a small sized stator and flywheel. For these models, the PIP sensor must be moved to the rear mounting holes to allow space for the Trail Tech flywheel. Also, the Trail Tech provided KTM side case must be used, instead of the stock side case.

#### 4-STK 450/505 SX-F 2007-2009 4-STK 450/505 XC-F 2008-2009

These KTM's use a S-8360A kit which will replace the stock stator and flywheel combination. A Regulator/Rectifier is not needed for this installation as it uses the stock unit. Install opposite the suggested removal process provided with this kit.

#### TIP: ADD OIL TO 'DRY SYSTEM' 4-STK 250 SX-F 2005-2009

For models that have a "dry system" that do not use oil, oil can be added to prevent excessive heat damage and rust. 1. With the bike on it's side, add 100ML of low-viscosity 5W30 motorcycle motor

oil to the engine case.

2. Using a liquid silicone gasket product, seal the weep hole located at the bottom of the engine case so that no oil can escape. Make sure everything is clean before application. Use a thin bead of silicone on both sides of the gasket for the best seal.



# **4-STK KTM ELECTRICAL SYSTEMS**

### **AC INSTRUCTIONS:**

AC AFTER INSTALLING A TRAIL TECH STATOR AND REGULATOR, ADD LIGHTS TO AC CIRCUIT. - SEE NEXT PAGE FOR DC INSTALLS -

#### **AC SYSTEMS STEP AC1 - REGULATOR:**

#### **AC SYSTEMS STEP AC2 - WIRING:**

AC circuits can use a regulator (regulator/rectifier not required.) If installing an AC system, the circuit should be set up as below.



# AC CIRCUIT CONCEPT **DIAGRAM (GENERIC):** HALOGEN LIGHT HALOGEN YELLOW LIGHT BROWN 0 **VELLOW VELLOW** REGULATOR STATOR

12 Volt AC Regulator wired in parallel.