

INSTALLATION INSTRUCTIONS

KIT #AKT0018

**JOHN DEERE 3010, 3020, 4010, 4020 TRACTORS
USED TO CONVERT 24-VOLT SYSTEMS TO 12-VOLT**

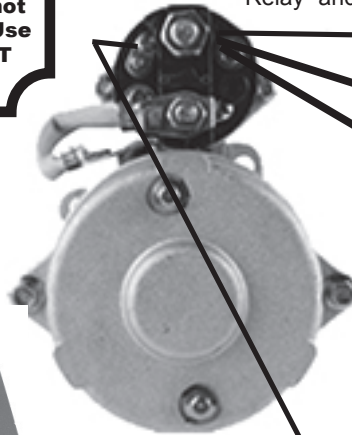
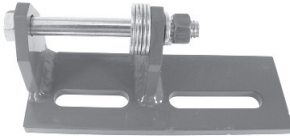
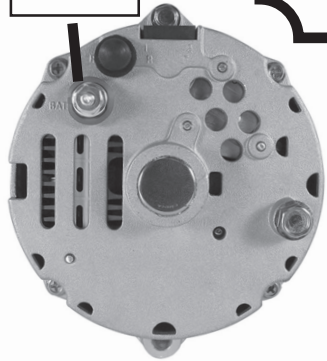
KIT CONTAINS:
(1) ADR0437 ALTERNATOR
(1) SNK0038 STARTER
(1) SFD6003 SOLENOID
(1) GDR9106 BRACKET
(1) AKT9207 WIRE & CABLE KIT
(1) SSW0008 VOLTAGE GAUGE - Use if Desired

It is suggested to use both 12V batteries, although it is possible to reduce this to a single 12-Volt battery, depending on system requirements

Battery Terminal - Brown and Blue Wires Attach Here

NOTE:
The **INDICATOR LIGHT** will not work with this conversion - Use the included **SSW0008 VOLT GAUGE**, if desired.

4th Terminal on Solenoid is "Relay" and is Not Required.



SOLENOID
Use 2 Red wires supplied in kit.

**Alternator
#ADR0437**

**Alternator
Bracket
#GDR9106**

**Starter
Motor
#SNK0038**

**12 VOLT
BATTERY**
NEGATIVE GROUND

**12 VOLT
BATTERY**
NEGATIVE GROUND

Negative Cables

Positive Cables

I-TERMINAL is NOT USED

NOTE:
INSTALL BATTERY AS NEGATIVE GROUND ONLY

- 1). Disconnect and mark all battery cables. Remove the existing starter, generator, and regulator.
- 2). Remove the existing generator bracket. Install the alternator bracket GDR9106 and Alternator ADR0437 from the kit. Make sure the belt lines up properly with the pulleys. It may be necessary to re-use the pulley from the generator on the alternator to get correct fit and alignment.
- 3). The alternator in this kit is a 1-wire design - only the battery cable needs to be hooked up - no other wires are used (Step 4). The existing regulator removed in step 1 is not used anymore.
- 4). Next to where the original regulator was installed is a wiring harness with 3 wires (brown, blue and black or brown, blue and pink depending on model). Cut this harness apart to expose the wires, and strip the insulation back from the ends. Combine the brown and blue wires together and attach them to the ring terminal from the kit. Then attach this ring terminal to the battery stud of the alternator (see picture). This is the only connection needed. The 3rd wire in the original harness is not used.
- 5). Install the STARTER and SOLENOID from the kit. Connect the wires as shown. The 2 red wires from the AKT9207 KIT are connected as shown - one to the ignition terminal on the starter, the other to the top battery post. The existing yellow (or different color) wire that was connected to the original starter's solenoid is now connected to the small S-TERMINAL on the SOLENOID. The small I-TERMINAL on the SOLENOID is NOT USED.
- 6). Install the POSITIVE battery cables from BOTH BATTERIES to the top terminal of the Starter. The original brown and blue wires on the tractor also are connected to the same terminal on the starter (see diagram above).
- 7). Ground the batteries by connecting the NEGATIVE POST from each battery to a known ground on the tractor.
- 8). Double check all connections to make sure they are clean, tight, and connected properly.

**Starter
Solenoid
#SFD6003**

Yellow wire from original starter connects to the small S-TERMINAL on this solenoid. The I-TERMINAL on this solenoid is NOT USED.

Conversion from one system voltage to another may require other circuits in the tractor to be modified which are not covered in these instructions.



**Wire & Cable Kit
#AKT9207**