

11SI ALTERNATOR INSTALLATION INSTRUCTIONS FOR REPLACING DELCO REMY 10SI, 11SI, 12SI OR BOSCH K1 ALTERNATORS

WARNING!!! ALWAYS USE PROPER EYE PROTECTION WHEN PERFORMING ANY MECHANICAL REPAIRS TO A VEHICLE – INCLUDING, BUT NOT LIMITED TO, ANY INSTALLATION AND OR REPAIRS TO THE DELCO REMY OR BOSCH ALTERNATORS. FAILURE TO USE PROPER EYE PROTECTION CAN LEAD TO SERIOUS AND PERMANENT EYE DAMAGE.

Only perform the mechanical functions that you are properly qualified to perform. Mechanical repairs that are beyond your technical capabilities should be handled by a professional installation specialist.

DANGER!!! To avoid injury or damage, always disconnect the negative cable at the battery before removing or replacing the alternator. The alternator output terminal is always live ("hot"). If the battery is not disconnected, a tool accidentally touching this terminal and ground can quickly get hot enough to cause skin burn or damage to the tool and surrounding parts.

Follow engine or vehicle manufacturer's instructions for removing the old alternator from the engine and installing the new alternator.

The alternator supplied in this package may have more terminals than the one being replaced. This alternator will operate properly by connecting only the phase and lamp terminals from the old alternator (These terminals are identified with a "P" and "L" on the voltage regulator connector of the alternator).

PULLEY INSTRUCTIONS: Use the pulley from old alternator if this alternator does not have a pulley or pulley supplied is different from the one on alternator being replaced. Hold the shaft by placing a 5/16" hex wrench in the hexagonal hole in the end of the shaft while removing or installing the pulley. Tighten the pulley nut to 80-110 Nm (59-81 lb in). If there are any spacers, when removing the fan and pulley, make sure all spacers are replaced when installing the pulley on the 11SI alternator. Dispose of fan. This procedure applies to all alternators being replaced.

FAN: Do not attempt to install fan from the old alternator. The 11SI alternators have internal cooling fans.

BELT TENSIONING INSTRUCTIONS: DO NOT OVER TIGHTEN BELT! Improper belt tension can damage the alternator or cause the bearings to fail later. If the belt must be tightened manually, pry only against the drive end (DE) frame. If that is not possible, use a wood block with one end positioned against the DE frame between the pry bar and alternator. Use a torque wrench to tighten mounting bolts to specified torque. Follow vehicle or engine manufacturer's specifications carefully for belt tension and mounting bolts torque.

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[FIGURE 1]

WEATHER PACK CONVERSION ADAPTER KIT (P/N) 10510587 FOR REPLACING 10SI, 12SI & BOSCH K1 WITH AN 11SI ALTERNATOR



INSTALLATION PROCEDURES

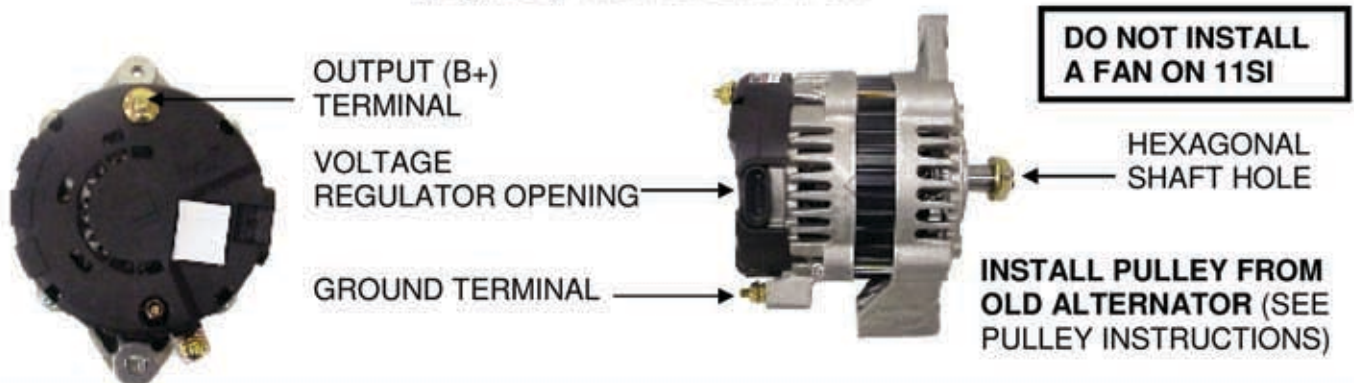
Determine the type of alternator this 11SI is replacing by checking the series type noted on the name tag of the alternator being replaced. Follow instructions for that alternator as noted below.

Alternator Make / Model	Figure
Delco Remy 11SI	2
Delco Remy 10SI	3
Delco Remy 12SI	4
Bosch K1	5

DELCO REMY 11SI REPLACING 11SI ALTERNATOR INSTRUCTIONS

[Figure 2] Identify and tag output (B+/Bat) lead and ground lead, if it has one, when removing old 11SI and install them on same terminals of new alternator. Tighten output terminal nut to 7.5-10.0 Nm (66-88 lb in) and ground terminal nut to 5.0-8.5 Nm (44-75 lb in), if it has a ground lead. **DO NOT OVER TIGHTEN OUTPUT TERMINAL NUT!** Delco Remy strongly recommends use of a ground lead. Plug and seat the weather pack connector into voltage regulator opening

[Figure 2] 11SI ALTERNATOR

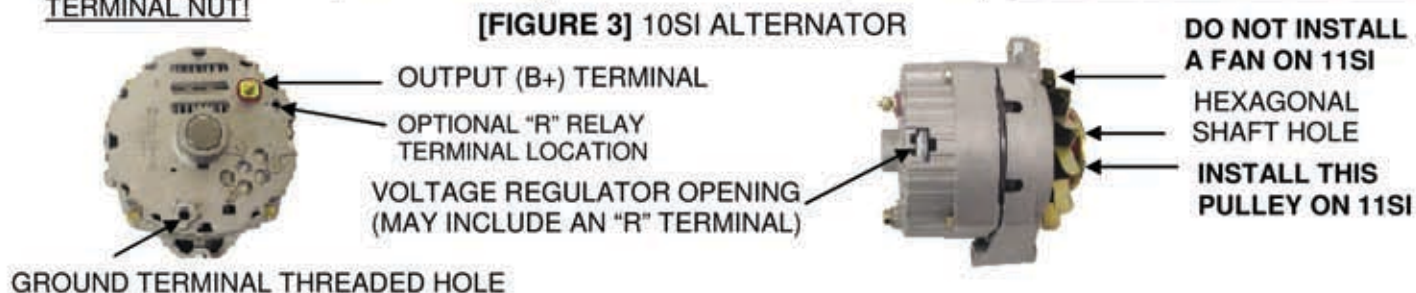


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DELCO REMY 11SI REPLACING 10SI ALTERNATOR INSTRUCTIONS

[FIGURE 3] Identify and tag the output (B+/BAT) lead, optional ground lead, voltage regulator number one lead AND optional relay "R" lead. **Note:** The old 10SI may not have an "R" terminal or has one that was not used. If it has an "R" terminal, it can be one of two types. It may be either a pin or blade terminal identified with an "R" on the end frame [See figure 3]. **When following steps below, cut and terminate the wires one at a time to avoid possible reversing:**

1. **If old 10SI alternator did not have or use a relay "R" terminal, go to step two.**
 - Cut terminal off the relay lead, identified with an "R" on case and strip insulation about 1/2". **[Figure 1]** Insert wire into red bullet connector from red (shorter) adapter lead, crimp and plug into mating red connector of adapter.
2. Most 10SI's have a sense lead (connected to # 2 terminal) which is not needed on the 11SI. Therefore, cut the lead and tape it to prevent it from grounding. It is "live" hot.
3. On vehicle voltage regulator connector harness, cut the wire to number one terminal ("1" identified on end frame) and strip insulation about 1/2". **[Figure 1]** Insert wire into blue bullet connector from blue (longer) adapter lead, crimp and plug into mating blue connector of adapter. **Note:** The blue lead must be connected for the 11SI to "turn on" and operate correctly.
4. Plug and seat the weather pack adapter into the alternator regulator opening.
5. If it has a ground lead, place it on ground terminal and tighten nut to 5.0-8.5 Nm (44-75 lb in). Delco Remy strongly recommends use of a ground lead.
6. Place output lead on output terminal and tighten nut to 7.5-10.0 Nm (66-88 lb in). **DO NOT OVER TIGHTEN OUTPUT TERMINAL NUT!**



DELCO REMY 11SI REPLACING 12SI ALTERNATOR INSTRUCTIONS

[Figure 4] Identify and tag the output (B+/BAT) lead, optional ground lead, voltage regulator number one lead and optional relay "R" lead. **Note:** The old 12SI may not have an "R" terminal or has one that was not used. It will be identified with an "R" on the case, if it has one. **When following steps below, cut and terminate the wires one at a time to avoid possible reversing:**

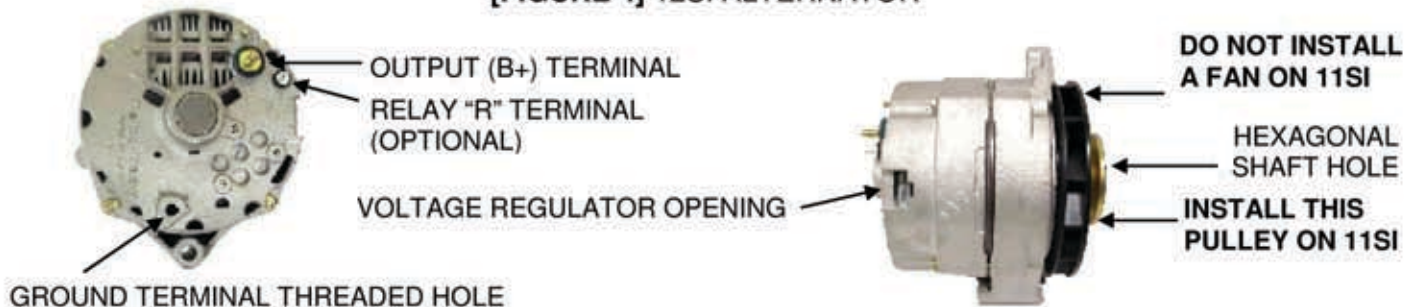
1. **If old 12SI alternator did not have or use a relay "R" terminal, go to step two.**
 - Cut terminal off the relay lead, identified with an "R" on case and strip insulation about 1/2". **[Figure 1]** Insert wire into red bullet connector from red (shorter) adapter lead, crimp and plug into mating red connector of adapter.
2. Most 12SI's have a sense lead (connected to # 2 terminal) which is not needed on the 11SI. Therefore, cut the lead and tape it to prevent it from grounding. It is "live" hot.
3. On vehicle voltage regulator connector harness, cut the wire to number one terminal ("1" identified on end frame) and strip insulation about 1/2". **[Figure 1]** Insert wire into blue bullet connector from blue (longer) adapter lead, crimp and plug into mating blue connector of adapter. **Note:** The blue lead must be connected for the 11SI to "turn on" and operate correctly.
4. Plug and seat the weather pack adapter into the regulator opening.
5. If it has a ground lead, place it on ground terminal and tighten nut to 5.0-8.5 Nm 44-75 lb in). Delco Remy recommends use of a ground lead.

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6. Place output lead on output terminal and tighten nut to 7.5-10.0 Nm (66-88 lb in). DO NOT OVER TIGHTEN OUTPUT TERMINAL NUT!

[FIGURE 4] 12SI ALTERNATOR



DELCO REMY 11SI REPLACING A BOSCH K1 ALTERNATOR

[Figure 5] Identify and tag the output (B+), "D+", "W" leads, which are identified on the end frame, and optional ground lead when removing the K1 alternator (**Note:** The "W" and ground terminals may not have been used). **When following replacement steps below, cut and terminate the wires one at a time to avoid possible reversing.**

1. **If the Bosch K1 alternator did not have or use a relay "W" terminal, go to step two.**
 - Cut terminal off the relay lead, identified with a "W" on case and strip insulation about 1/2". **[Figure 1]** Insert wire into red bullet connector from red (shorter) adapter lead, crimp and plug into mating red connector of adapter.
2. Cut the ring terminal off "D+" lead of vehicle wiring harness and strip the insulation about 1/2". **[Figure 1]** Insert wire into blue bullet connector from blue (longer) adapter lead, crimp and plug into mating blue connector of adapter. **Note:** The blue lead must be connected for the 11SI to "turn on" and operate correctly.
3. Plug and seat the weather pack adapter into the regulator opening.
4. If a ground lead was used on the K1, place it on the 11SI ground terminal and tighten nut to 5.0-8.5 Nm (44-75 lb in). Delco Remy strongly recommends use of a ground lead.
5. Place output lead on output terminal and tighten nut to 7.5-10.0 Nm (66-88 lb in). DO NOT OVER TIGHTEN OUTPUT TERMINAL NUT!

[FIGURE 5] K1 ALTERNATOR



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