

Technical Instructions

Vanguard Motor Replacement Instructions

These instructions are provided to enable replacing the older Vanguard motor/gearbox with the newer one.

CAUTION

Read all notes and instructions.

1. Remove the four screws and lift cover from the operator chassis (Fig-1). Set all aside for later reassembly.
2. Turn the Vanguard power switch to OFF. It is located under the chassis (Fig-2A & 2B).
3. Disconnect ALL wires from 6-Position terminal strip (Fig-3A & 3B).

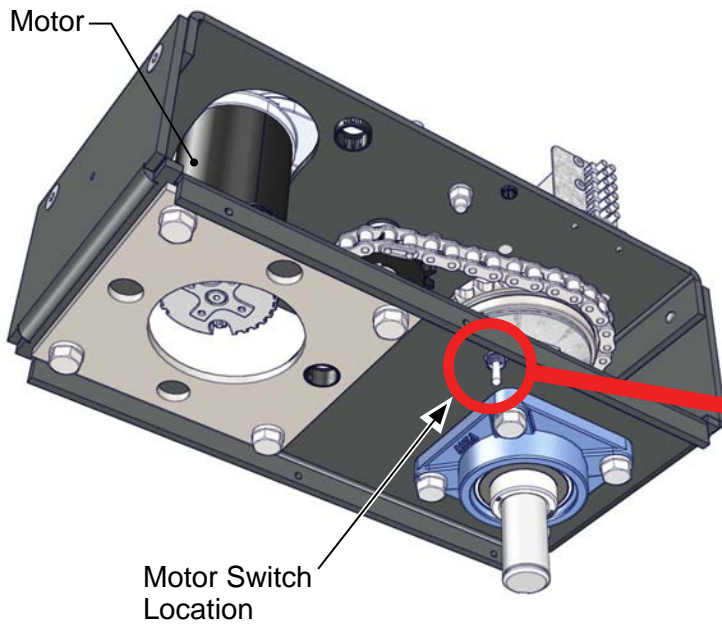
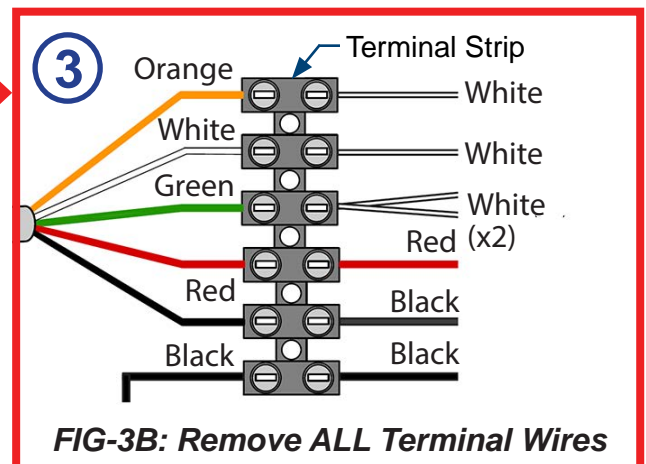
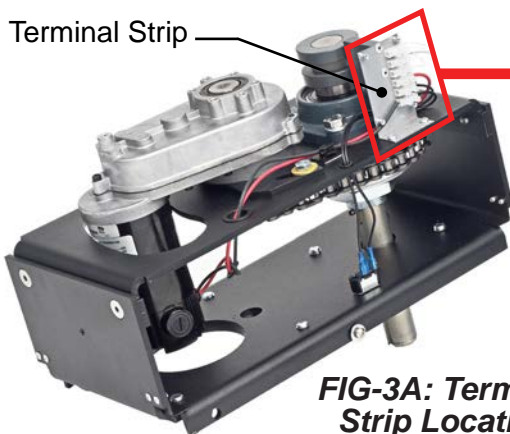
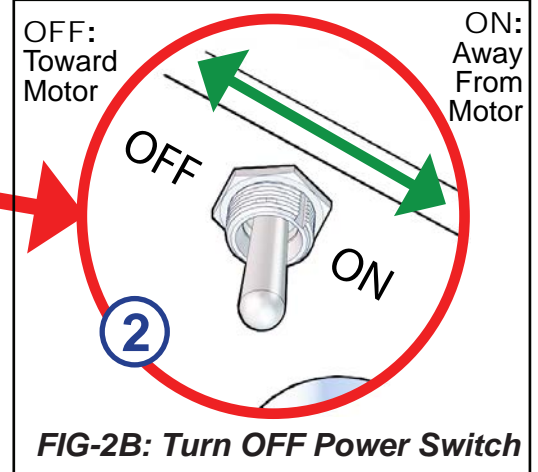
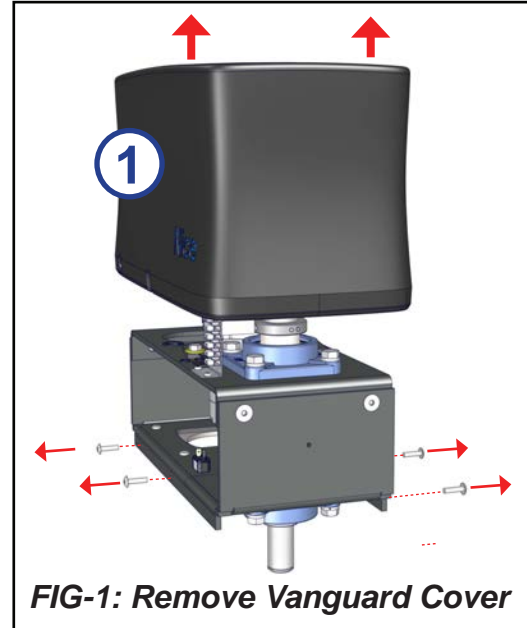


FIG-2A: Power Switch Location



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4. Loosen the two motor mount bolts in the crescent slots (Fig-4), and move motor slightly in direction shown to loosen up the chain.
5. Find the master link on the chain (Fig-5A), slide off the master link pin (Fig-5B) from the master link and remove chain.
6. Loosen the two set screws in the small sprocket and remove sprocket from drive shaft (Fig-6). Remove the shaft key from the shaft and retain for later reassembly.

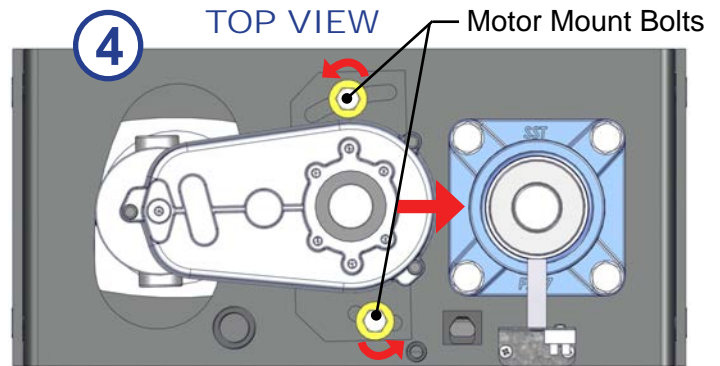


FIG-4: Loosen Motor Mount Bolts & Move Motor

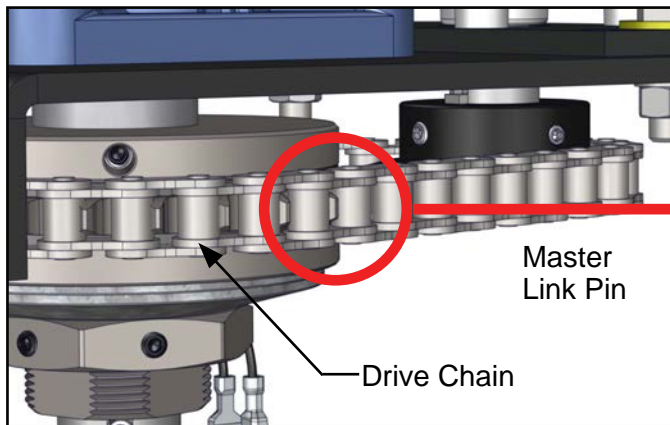


FIG-5A: Master Link Location

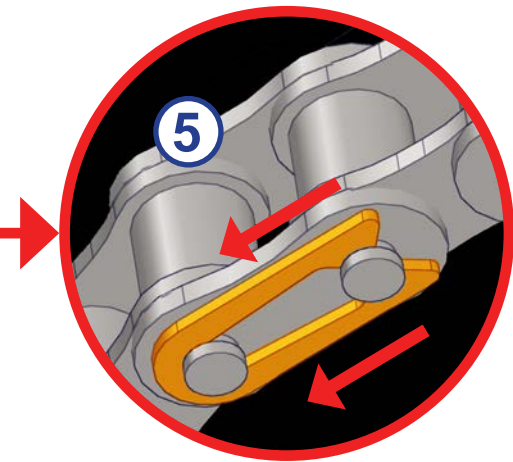


FIG-5B: Remove Master Link & Chain

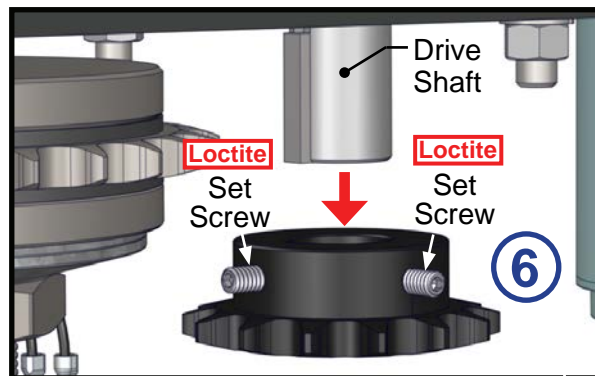


FIG-6: Remove Smaller Sprocket

7. Remove motor mount hardware (Fig-7) including two larger motor mounts (bolts, washers and nuts) and the smaller bolt and washer (underneath), then lift the old motor/gear assembly from the top of the chassis.
8. Remove the three screws from bottom of motor mount plate (Fig-8), then remove plate from motor (retain parts). NOTE: Loctite is applied to these screws. These three screws

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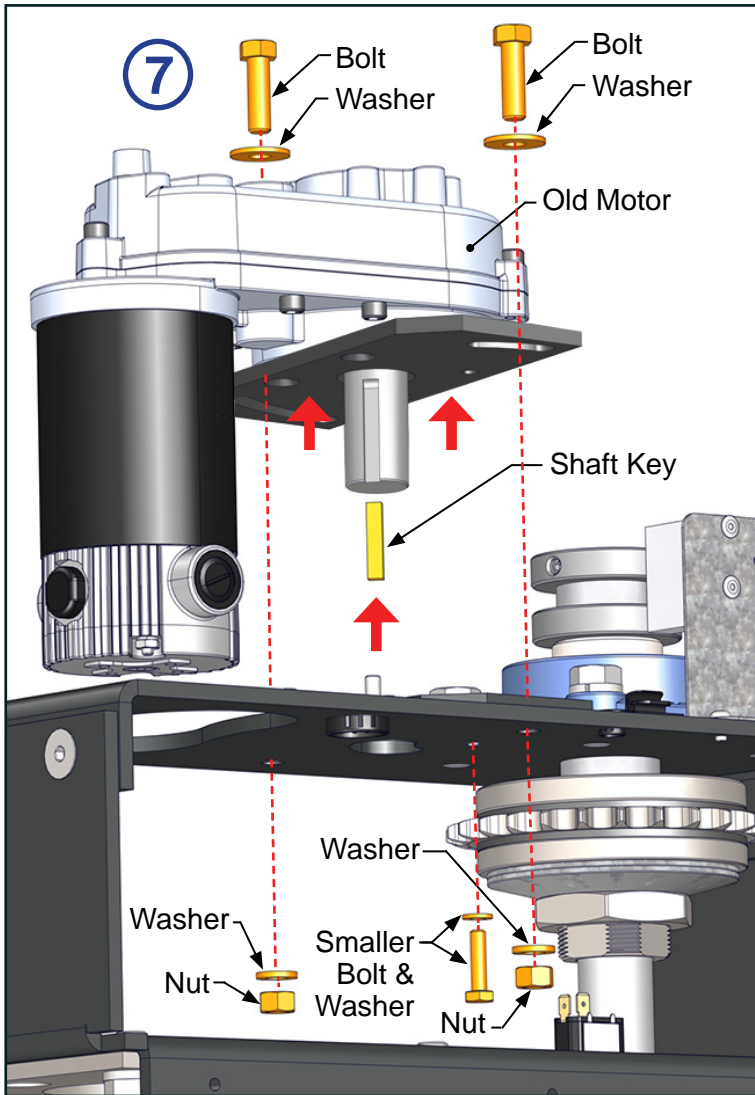


FIG-7: Remove Motor Mount Hardware & Motor

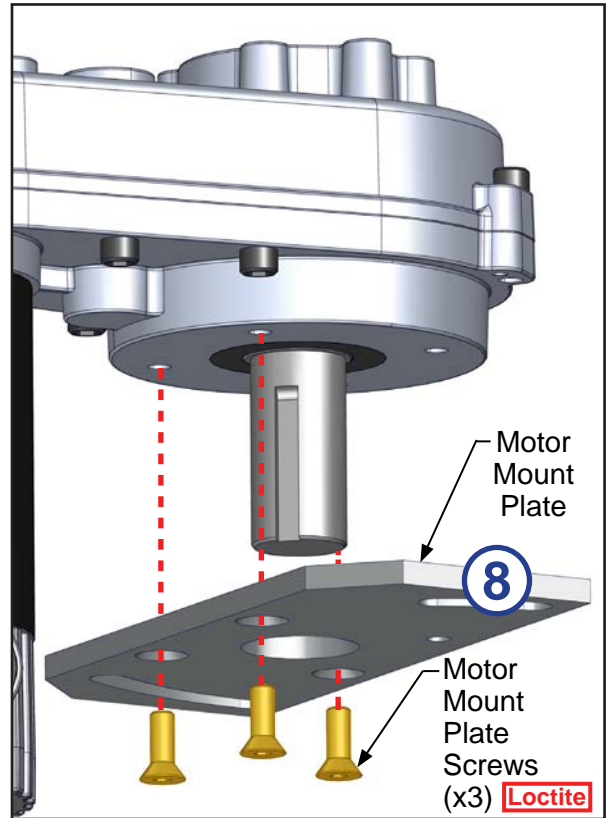


FIG-8: Remove Plate from Old Motor

9. Remove OLD 6-position terminal strip and replace with NEW 8-Position terminal Strip (x2 screws).

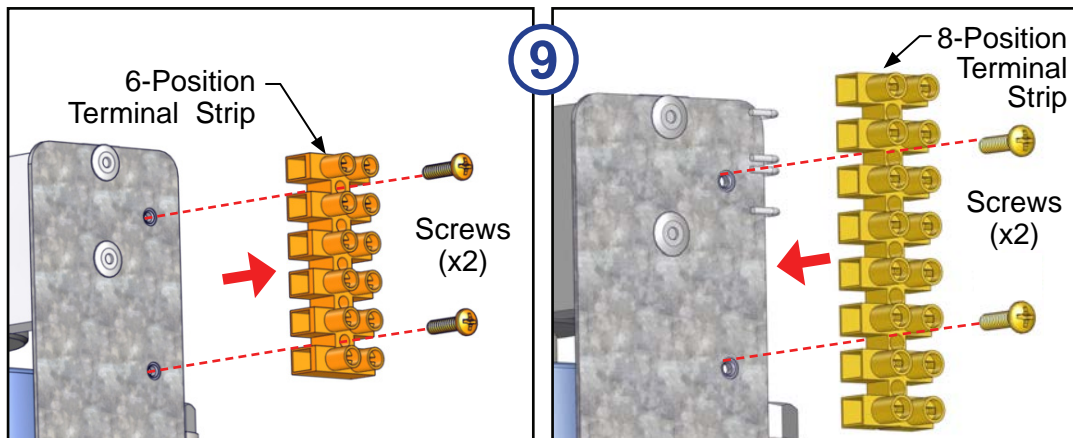


FIG-9: Replace 6-Position Terminal Strip with 8-Position

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NOTICE

Assembly of new motor is a reversal of the disassembly of old motor, so the following instructions are simplified and accompanied by an exploded diagram showing all parts.

10. Apply Loctite to the three recessed screws and use to install the motor mount plate removed in Step 8 onto the new motor. Ensure correct holes are populated per Fig-8).
11. Install the new motor/gear assembly into the chassis as shown (Fig-10).
12. Install all bolts, washers, and nuts removed in Step 7 (Fig-10). Leave bolts in crescent slots untightened.
13. Install the shaft key (retained in Step 6) into the shaft, then apply loctite to both set screws and use to install the NEW small sprocket (P/N MX5622) onto the drive shaft.
14. Retrieve and install the NEW chain onto large and small sprockets and fasten the master link, move the entire motor assembly (via the crescent slots) to tighten the chain, then tighten the bolts in the crescent slots.

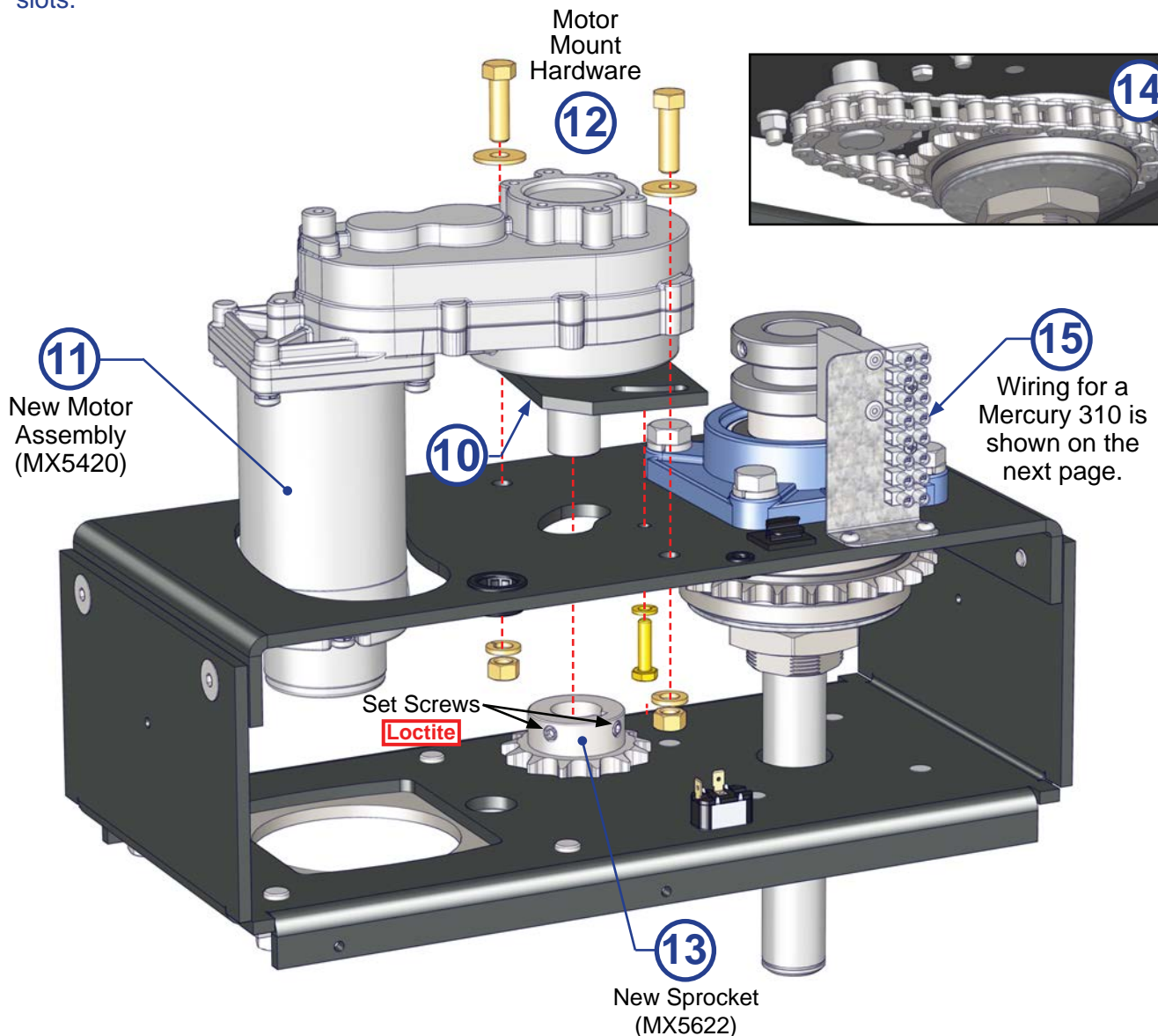


FIG-10: Assembly of New Motor

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15. Connect all wires to the 8-position terminal strip, as shown in Fig-11.

16. Replace cover and four screws to finish this retrofit operation.

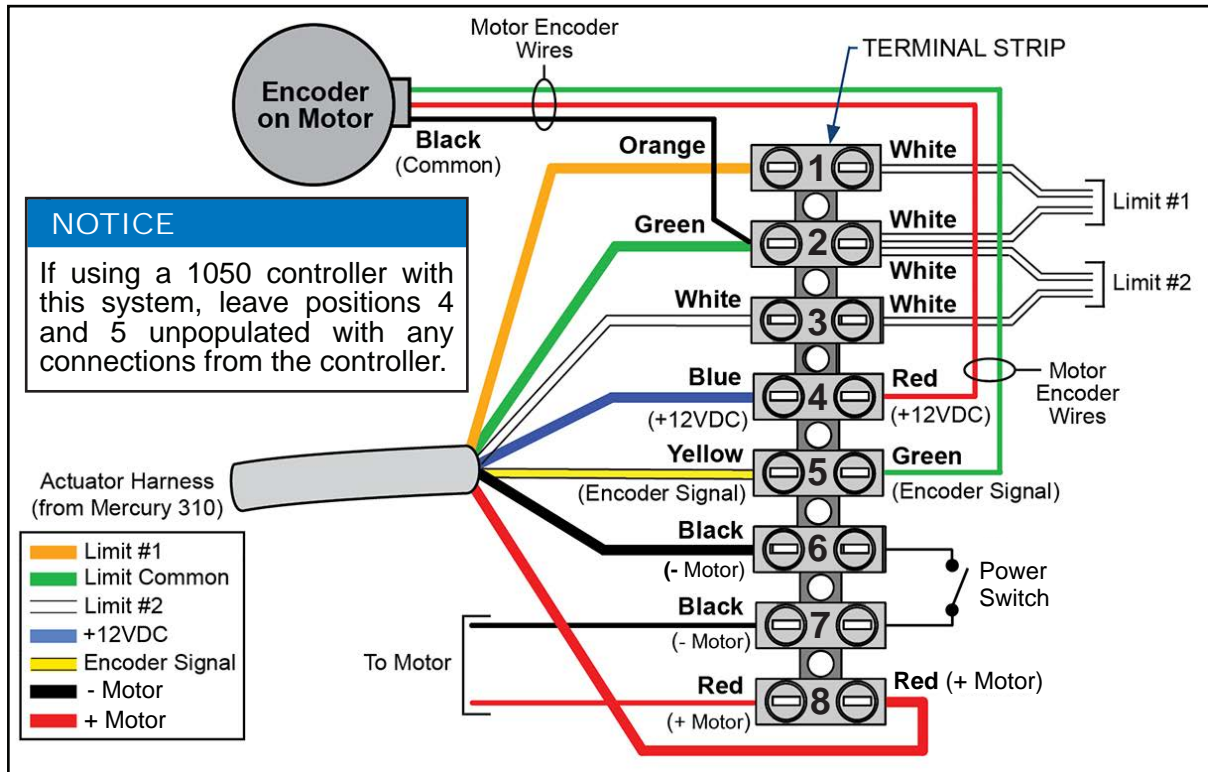


FIG-11: New Mercury 310 Motor wiring to 8-Position Terminal Strip

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