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Waldrop et al.(10) **Pub. No.: US 2022/0352789 A1**(43) **Pub. Date: Nov. 3, 2022**(54) **HARD START KIT FOR MULTIPLE
REPLACEMENT APPLICATIONS**(52) **U.S. Cl.**
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Beach, FL (US)(21) Appl. No.: **17/731,419**(22) Filed: **Apr. 28, 2022****Related U.S. Application Data**(60) Provisional application No. 63/282,965, filed on Nov.
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H01G 2/10 (2006.01)(57) **ABSTRACT**

A hard start capacitor replacement unit includes a capacitor container having a cover, a plurality of capacitors received within the container, each of said capacitors having a capacitance value, a common terminal mounted on the cover and electrically connected to a common terminal of each of said plurality of capacitors, a plurality of cover terminals mounted on the cover spaced apart from the common terminal and from each other, each cover terminal respectively electrically connected to one of the plurality of capacitors, a relay having contacts and being capable of opening and closing said contacts in response to a monitored condition of the motor, the relay having relay terminals, a fuse electrically connected to one of the relay terminals by a first wire wherein the fuse electrically disconnects the hard start capacitor replacement unit and the motor upon a failure, and a second wire electrically connecting one of the relay terminals and the motor, a third wire electrically connecting the common terminal and one of the relay terminals, a fourth wire electrically connecting one or more cover terminals to one of the relay terminals, wherein the contacts of the relay close to electrically connect one or more capacitors of the plurality of capacitors to the motor, and the contacts of the relay open to electrically disconnect the one or more capacitors of the plurality of capacitors from the motor.

