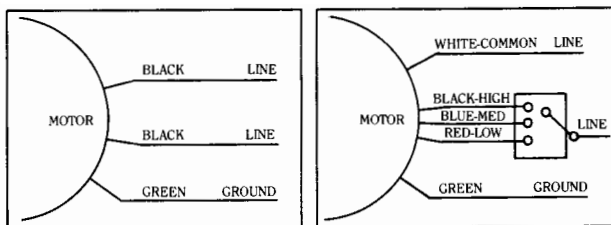


MOTOR WIRING AND ROTATION REVERSING

Motor leads are either color-coded or numbered for identification. There are variations in the color codings between manufacturers so it is always best to check the old motor first to make sure the existing wiring system is identified and diagrammed. If not, make your own diagram at the time of disassembly.

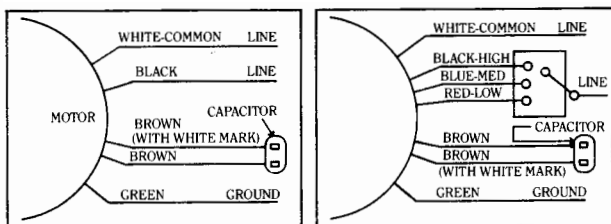
FACT Most Fasco PSC replacement motors have two brown capacitor leads in order to provide a simple hook-up. One of the brown leads has a white tracer on it. This lead can be cut off and insulated when only one capacitor lead is desired. It is common to see OEM applications with only one capacitor lead connected to the capacitor. The other lead on the other side of the capacitor is usually the common.

Typical Wiring Diagram for Shaded-Pole Motors



Standard wiring color codes as used by FASCO and most other manufacturers for Shaded-Pole motors.

Typical Wiring Diagram for P.S.C. Motors



Permanent-Split Capacitor motors have many different kinds of wiring arrangements. The standard for FASCO and most other manufacturers is shown.



FACT If the ground lead is present, it will be green or green with a yellow tracer. The wiring diagram for all Fasco motors is shown on the motor nameplate.

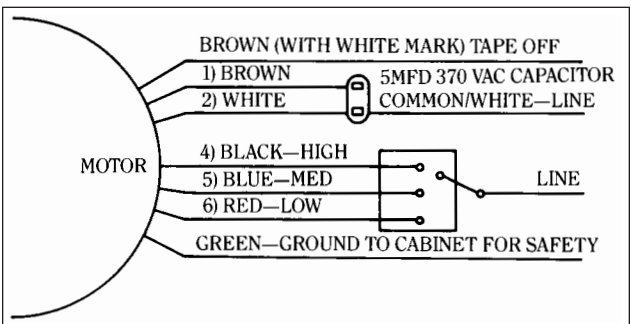
FACT To reverse rotation of Fasco electrically reversible models, switch the four external connectors (two female receptors and two male plugs). It's impossible to plug the male plugs together, and it's impossible to plug the female receptors into each other. One plug goes into each receptor and, if rotation is wrong, simply reverse the plugs.

FACT The current Fasco reversing lead system consists of two yellow and two purple leads.

FACT On multi-speed motors, always connect the common (white) lead to the power first.

FACT Connecting like color leads (yellow to yellow, purple to purple) will give clockwise rotation (shaft end). Connecting unlike color leads will give counter clockwise rotation (shaft end).

FACT When the original motor does not have two separate capacitor leads and the original wiring pattern is desired, the following wiring diagram can be used on many Fasco motors.



MOTOR WIRING AND ROTATION REVERSING (continued)

FACT Mechanically reversing rotation is possible with certain models. The model will need to have the inherent feature of the stator being positioned exactly in the center of the motor. Each motor will need to be looked at on an individual basis. If the motor has thru-bolts, you can use the following procedures for reversing:

1. Remove the thru-bolts.
2. Remove one end shield.
3. Remove stator, turn it around, then re-insert it. Leads should be pulled through the available end shield ventilating openings.
4. Replace end shield, thru-bolts, and re-tighten thru-bolts.
5. Check that shaft turns freely. If shaft is tight, tap motor lightly with non-metallic mallet. It may sometimes be necessary to loosen and re-tighten thru-bolts.

FACT When connecting multi-speed motors, always connect the common (white) lead to the power supply first. The various speed leads go to the switching device. **IMPORTANT:** If line voltage is applied to two of the speed leads at once, the motor winding can quickly overheat and fail. The overload cannot protect the motor in this case.

FACT The direction of rotation of a Shaded-Pole motor is determined by the location of the shading bands (coil) imbedded in the stator poles. Rotation is toward the shading band.

FACT Before dismantling a motor, scratch an arrow on the case of the bad motor indicating direction of rotation.

FACT Rotation of Fasco motors is defined by looking at the shaft end of single shaft motors or opposite lead end on double shaft motors.

FACT Do not carry motor by its leads. They can easily be damaged.

FACT Fasco motors all have wiring diagrams on the nameplate. Each model is designed with the versatility to replace many motors using features such as electrical reversing, and extended studs.

FACT Green or green with a yellow tracer is always the ground wire.

FACT Never connect the line voltage to two speed leads.

FACT One brown capacitor lead, on Fasco motors that have two brown capacitor leads, has a white tracer. Tape off this lead if only one capacitor lead is required. Simply connect the solid brown lead to one side of the capacitor. The other side of the capacitor is where the motor's white lead is connected along with one of the AC power leads. See diagram in this section.