

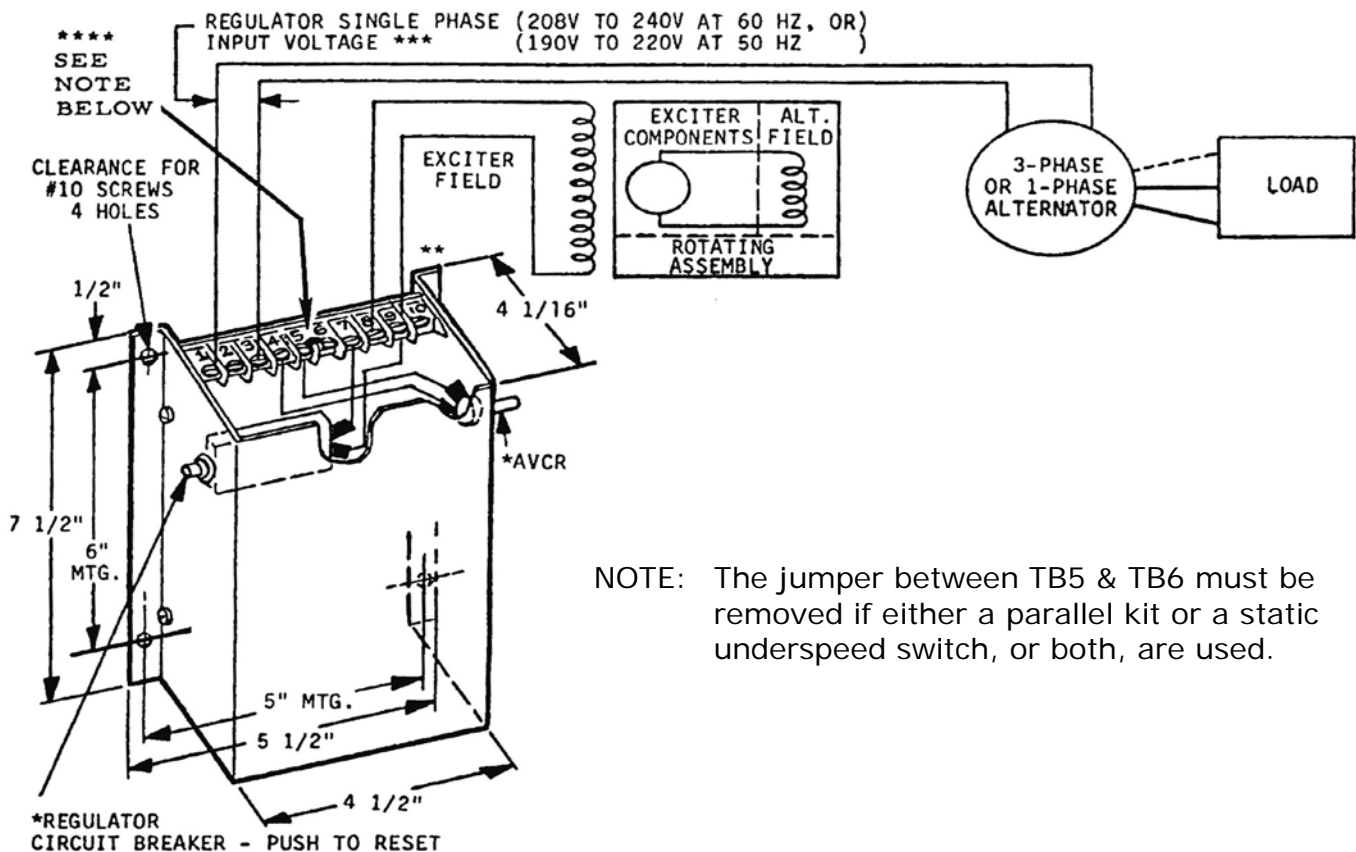
GEN-POWER CONTROLS, INC.®

VR-182

Series Voltage Regulators



Installation & Operation



Installation

- The regulator circuit breaker and the automatic voltage control rheostat (AVCR) are normally mounted within the regulator cover. Either or both can be remotely mounted as per application requirements. Observe the terminal board connections as shown.
- Remove the jumper between terminal board number 9 and 10 for alternators above 200 kilowatts.
- The input voltage to the regulator must be between 208 and 240 volts at 60 Hertz or between 190 and 220 Volts at 50 Hertz.

The regulator can be applied with various standard alternator connections having standard nameplate voltages as shown on back of this sheet.

If 208 to 240 volts at 60 Hertz or 190 to 220 volts at 50 Hertz is not available directly from the alternator, the regulator can still be used if a 400 volt ampere or greater isolation transformer is used between the regulator and the alternator. The input voltage to the isolation transformer must be the same as the voltage available from the alternator and the output must be between 208 and 240 volts at 60 Hertz or 190 to 220 volts at 50 Hertz.

Operation:

1. For new installation, turn the AVCR all the way counter-clockwise so that the line voltage will be at a minimum after the engine is started.
2. Start the driving engine and adjust to rated speed of the generator.

CAUTION: Generators operating with automatic voltage regulators should not be run at less than nameplate speed, unless equipped with underspeed protection. Reduced speed operation may damage regulator or generator.

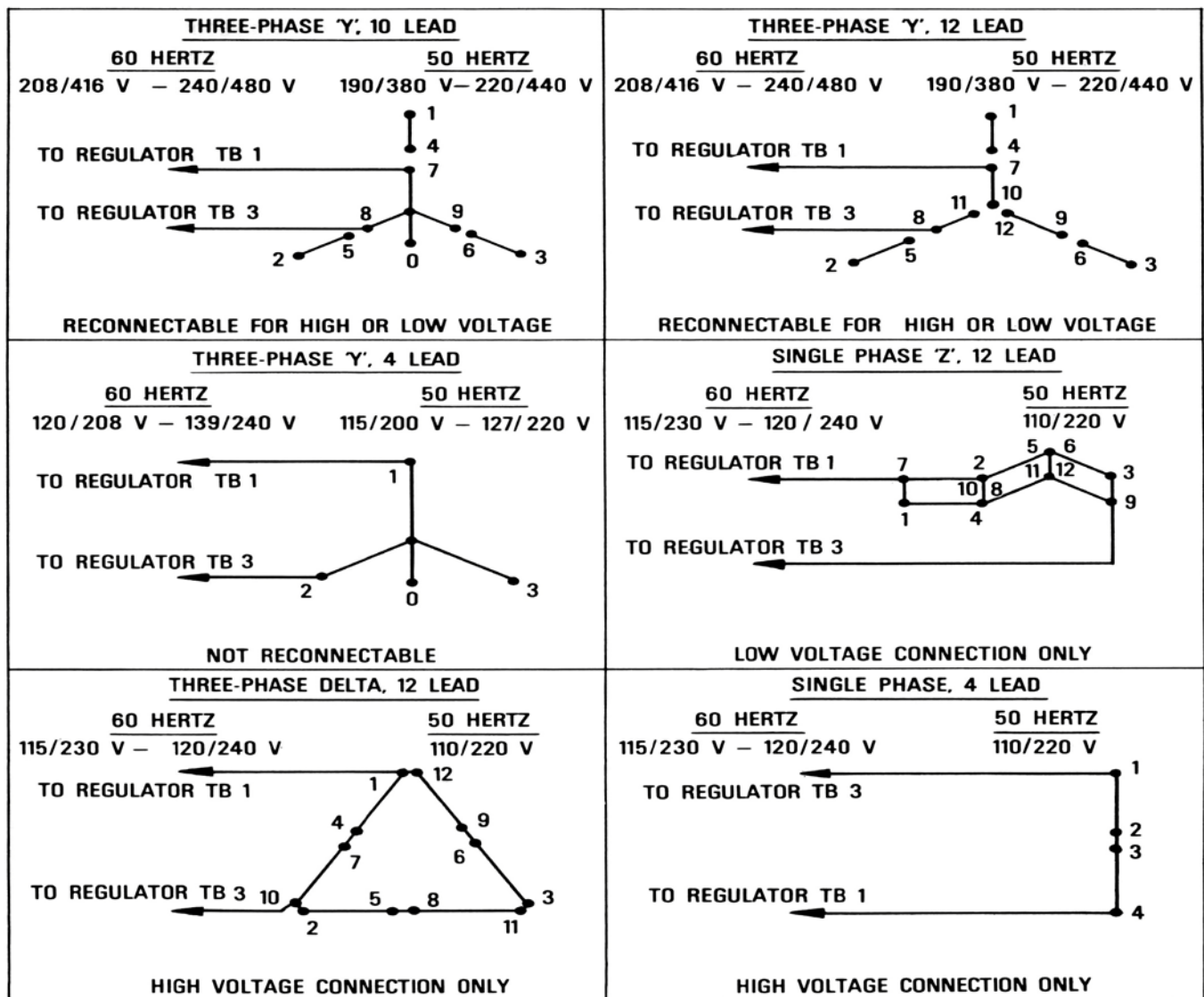
3. Adjust the generator voltage to the desired level within the nameplate rating with the AVCR.
4. Close the line switch or circuit breaker.
5. Check amperes, volts, and frequency to be certain values are within nameplate rating. Also check for line balance on both voltage and current on three-phase systems.

FIELD FLASHING

CAUTION: The rectifiers in the regulator will be damaged if the generator exciter is flashed wrong. The correct polarity for field flashing is:

Battery (+) on Regulator Terminal 8

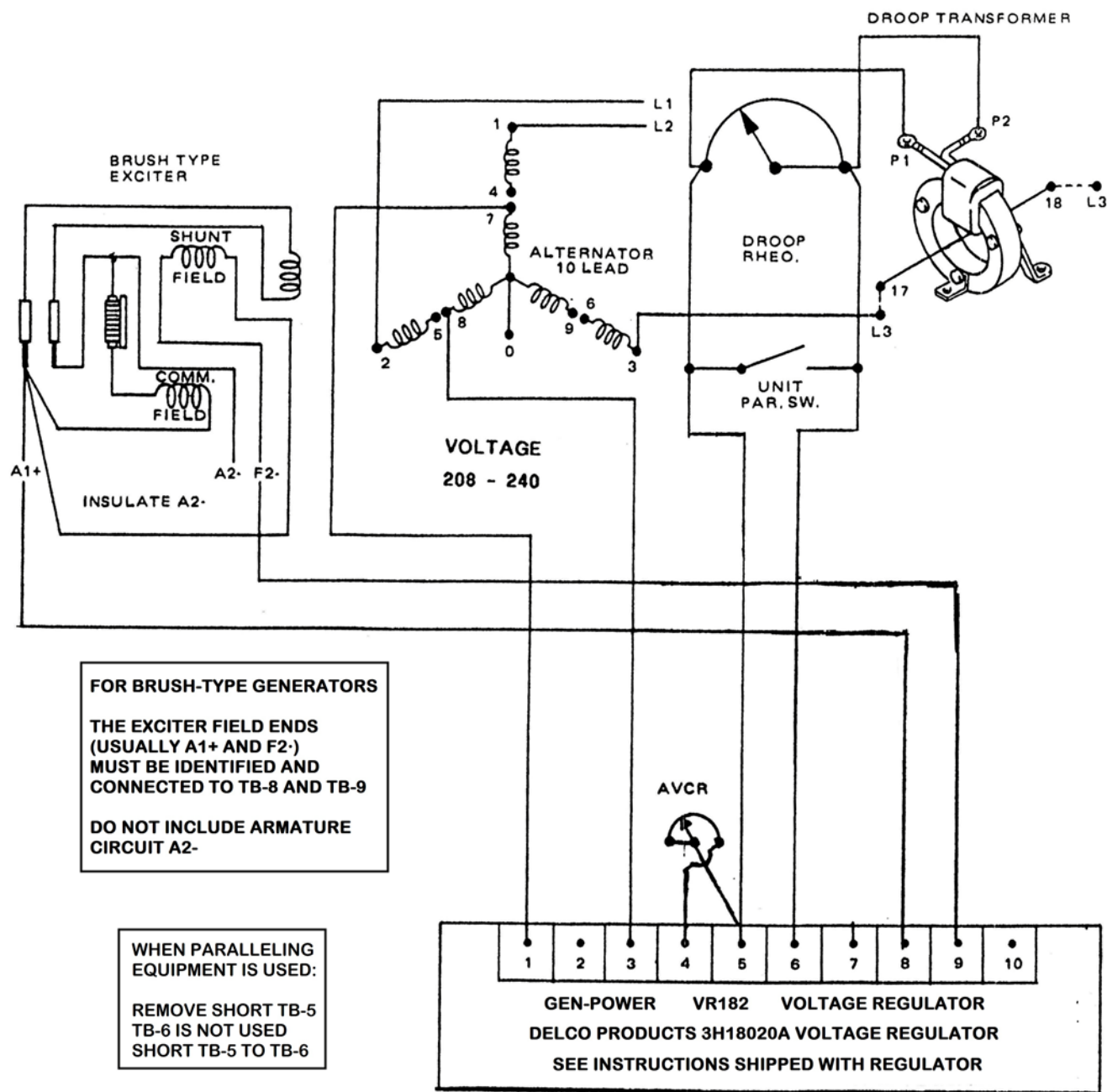
Battery (-) on Regulator Terminal 9



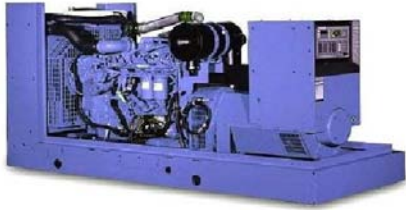
ACCESSORIES:

- H39180C Paralleling Kit** - for 3-phase, Wye connected, 10 or 12 lead alternator less than 550 KW. Other paralleling kit available for different alternator connections, contact the factory.
- H44000U Static Under-Speed Switch** - To protect the alternator-regulator system when the frequency is more than 10% below rated frequency.
- H43800M Manual Control** - Adjustable transformer type with automatic-manual switch included.
- 4945833 E.M.I. Kit** - Electro-magnetic Interference (E.M.I.) filter. The purpose is to reduce the E.M.I. (radio noise) level.
- H38000 Serial C Triple Action Boost (TAB)** - The TAB system improves generator-regulator performance in three ways:
 - Strong short-circuit drive.
 - Improve motor starting.
 - Increased operating current range of regulator.

WHEN ORDERING ACCESSORIES, INCLUDE THE ALTERNATOR MODEL NUMBER.



TYPICAL DIAGRAM FOR A DELCO PRODUCTS 10-LEAD, BRUSH-TYPE GENERATOR WITH PARALLELING EQUIPMENT



Electronic Services, Inc.

Specialists in Generator Controls

590 East Dayton Drive, Fairborn, OH 45324

Direct: (937) 878-0673 Toll Free: (800) 537-0055 Fax: (937) 878-0869

New and Rebuilt Regulator Warranty Policy

The following Warranty Policy is for units purchased from ELECTRONIC SERVICES, INC.® and may be amended or revoked at any time without prior notification.

Warranty does not cover:

- Malfunctions resulting from misuse, negligence, or accident
- Improper connections
- Improper assembly to the generator set
- Operations not within specifications shown on the nameplate
- Alterations not approved by ELECTRONIC SERVICES, INC.®
- Improper storage, handling, or installation
- Loss of use of the equipment and other incidental or consequential damages, loss of time or profits, parts adjustment or repair at site, inconvenience, or labor and transportation for removal from or reinstallation of the control in the generator set

Repairs and/or replacement of said unit to be considered under warranty will be at the discretion of ELECTRONIC SERVICES, INC.®

The above stated warranty will be null and void if it is determined by ELECTRONIC SERVICES, INC.® that said unit has been repaired, or attempted to be repaired, adjusted or "checked out" by another individual or repair shop/center other than ELECTRONIC SERVICES, INC.®

ALL SHIPPING AND HANDLING CHARGES FOR RETURN OF SAID UNIT WILL
BE THE RESPONSIBILITY OF THE PURCHASER/CUSTOMER.

GEN-POWER CONTROLS, UNITS MANUFACTURED AT OUR FACILITY, AND ALL UNITS REBUILT BY ELECTRONIC SERVICES, INC.®:

Each will be individually evaluated for Warranty consideration by a qualified technician/engineer. Warranty repair/replacement is at the discretion of ELECTRONIC SERVICES, INC.®

OEM-MANUFACTURED UNITS (NEW)

ELECTRONIC SERVICES, INC.® is an authorized repair center for BASLER ELECTRIC®. Upon our recommendation or replacement, the final approval is issued by BASLER ELECTRIC®. Replacement or repair of said unit will be after their determination and written approval. MARATHON®, STAMFORD NEWAGE®, and POWER-TRONICS, INC.® require the return of the unit to their facilities for final determination.