

RGU™ Supplement to 1336 FORCE™ Service Manuals

This publication shows the appropriate 1336 FORCE Service Manual for servicing of the RGU power structure.

Important: The 1336 FORCE Service Manual is to be used in conjunction with publication 2364F-5.01, *Regenerative DC Bus Supply–User Manual*, and your corresponding drive system schematics.

Important: If the 1336 FORCE Service Manual and the Regenerative DC Bus Supply User Manual are in contradiction, the Regenerative DC Bus Supply User Manual takes precedence.

Which 1336 FORCE Service Manual Should I Use?

RGU Current Code	1336 FORCE Service Manual
J	1336 FORCE-6.12
K	1336 FORCE-6.13
L	1336 FORCE-6.14
M	1336 FORCE-6.15
N	<i>Not available at time of printing.</i>

How the RGU Power Structure Assembly Differs From the 1336 FORCE

- The RGU does not have:
 - a 1336T control board
 - a PLC communication or standard adapter board (1336-GT1 or GT2 option)
 - any L-option interface boards

Note: The RGU main control board is located where you would find the 1336T control board and 1336-GT1/GT2 option in the 1336 FORCE.

- The RGU does not have a precharge board. Instead, the RGU has an isolation board that is located exactly where you would find a precharge board in the 1336 FORCE. (The RGU does perform the precharge function.)
- RGU precharge resistors reside in the power structure assembly, but the precharge circuitry is located external to the power structure assembly.

4. The RGU may have one of the following options mounted directly on the main control board:
 - GM1 board - Remote I/O
 - GM2 board - RS232/422/483 (using DF1 protocol) and DH485
 - GM5 board - Device Net
5. The RGU may have an optional R2R (RGU-to-RGU fiber optic communication) board mounted on the main control board.

Safety Precautions

The following general precautions apply when servicing an RGU or a drive system lineup:



ATTENTION: Only those familiar with the drive system, the products used in the system, and the associated machinery should plan or implement the installation, startup, and future maintenance of the system. Failure to comply can result in personal injury and/or equipment damage.

ATTENTION: Verify that all sources of AC and DC power are deenergized and locked out or tagged out in accordance with the requirements of ANSI/NFPA 70E, Part II.

ATTENTION: The system may contain stored energy devices. To avoid the hazard of electrical shock, verify that all voltage on capacitors has been discharged before attempting to service, repair, or remove a drive system or its components. You should only attempt the procedures in this manual if you are qualified to do so and are familiar with solid-state control equipment and the safety procedures in publication NFPA 70E.

ATTENTION: When servicing any unit, do not drop any nuts, bolts, washers, etc. inside the unit, as they may cause a short circuit on power up.

ATTENTION: This drive system contains ESD (Electrostatic Discharge) sensitive parts and assemblies. Static control precautions are required when installing, testing, or repairing this assembly. Component damage can result if ESD control procedures are not followed. If you are not familiar with static control procedures, refer to Rockwell Automation publication 8000-4.5.2, *Guarding Against Electrostatic Damage* or any other applicable ESD protection handbook.
