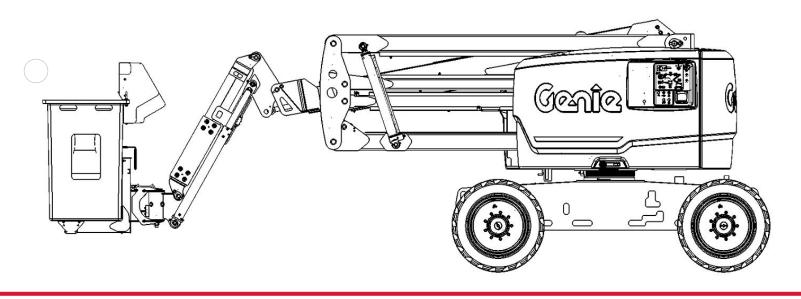


**Z45 SUB START-UP PROCEDURE** 













#### **DANGER**

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury.

Many of the hazards identified in the Operator's Manual are also safety hazards when maintenance and repair procedures are performed.

## DO NOT PERFORM MAINTENANCE UNLESS:

- √ You are trained and qualified to perform maintenance on this machine.
- √ You read, understand and obey:
  - manufacturer's instructions and safety rules
  - employer's safety rules and worksite regulations
  - applicable governmental regulations
- √ You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this Tech Tip is a supplement to the Service Manual. Consult the appropriate Service Manual of your machine for safety rules and hazards.



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# CONTENTS TECH TIP#206







#### INTRODUCTION

The Z45 SUB is a Category E rated unit designed for substation work.

Compared to a standard Z45, the start-up procedure for a Z45 Sub is different because the electrical cables have been removed from the boom and replaced with a fiber optic cable. This requires the PCON (Platform Controls) be powered by an additional platform battery. This battery will need to have 12v to power up the PCON and send a load cell signal to GCON.

The software version installed on the Z45 Sub will determine the start-up procedure required.

To determine which software version is installed, with the unit running push the E-stop in at the PCON and time how long it takes for the PCON to power down (go to sleep). If it takes about 30 minutes, the Early Production software is installed. Follow Steps 1-3 to properly start the unit.

If it powers down in about 2-3 minutes, then the current production software is installed. Follow steps 4 through 6 to properly start the unit.

#### **EARLY PRODUCTION MODELS OVERVIEW**

Early production models will need to have the PCON woke up before attempting to start the unit. Attempting to start the unit without waking the upper controls will prevent the unit from starting and display load cell fault 7617 (load cell not calibrated) and/or 7613 (load cell not detected) on the display screen at the GCON (Ground Controls). This is caused by the PCON not sending a load cell signal to the GCON.

Units with the following serial numbers can be updated to the newest software. Until the software is updated or verified to have been updated, Steps 1-3 will be followed to start the unit.

2210172890	2210172891	2210574611
2210875116	2210975118	2220575126
2220675128	2220875130	2220975132
	2221080861	

### **EARLY PRODUCTION MODELS OVERVIEW (Continued)**

The following Serial Numbers cannot be updated with new software without changing out components.

2201072309	2201272888	2201272889



With either software version, when the GCON E-Stop is pulled out and the key switch is turned to GCON mode it must be started within 10 seconds. Otherwise, it will display the same faults and the load cell will need to be recalibrated.

#### **Abbreviations**

PCON (Platform Controls) GCON (Ground Controls)

#### STEP 1

Pull out the E-Stop at the PCON and then press the start toggle for 3-5 seconds to wake the platform controls.

When the controls are awake, an LED light on the left side of the yellow break-away cable will light up.

#### STEP 2

Move to the GCON and pull the E-Stop out. Then turn the key switch to GCON mode and use start toggle to start the unit.

#### STEP 3

Once the unit has started, the key switch can be turned to PCON mode and the unit is ready to be operated from the platform.

#### **CURRENT PRODUCTION MODELS OVERVIEW**

Later production models will automatically wake up the PCON when the engine starts. When the engine starts, the generator will start to spin, charging the platform battery. This occurs because of a software change made during production.

#### STEP 4

From the GCON, turn the keyswitch to GCON mode, and pull the E-stop out, then press the engine start toggle to start the unit's engine. The engine must be started within 10 seconds of system power up to avoid diagnostic faults.

#### STEP 5

Go to PCON to pull out PCON E-stop.

#### STEP 6

Then go back to GCON and Turn the key switch to PCON mode to enable operation from PCON.

With the E-Stop at the PCON is pulled out the unit will continue to run and is ready for operation.

#### **CONCLUSION**

If you have any questions on this procedure, contact Terex Utilities Technical Support at 1-844-TEREX4U (1-844-837-3948) or utilities.service@terex.com.

#### **Video Tech Tip**

A video tech tip of this and numerous other procedures is available on our Tech Tip Channel.



FOR FURTHER ASSISTANCE,
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM
PHONE: 1-844-TEREX4U (1-844-837-3948) | EMAIL: UTILITIES.SERVICE@TEREX.COM