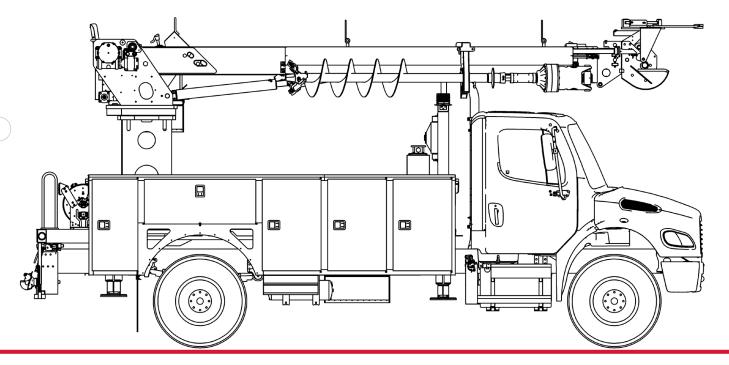


FIBERGLASS BOSS REPAIR



NO. 9





SERVICE CALL: FIBERGLASS BOSS REPAIR



MODEL(S): C3000, C4000, C5000, C6000, GENERAL, TELECON, L4000, XL4000



TOOLS NEEDED: SEE INTRODUCTION



#### **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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## **TECH TIP#9**

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| Tools required

#### **INTRODUCTION**



| Remove broken boss

STEP 1



| Sand boss and wedge

| Drill a 1-inch hole

| Put a groove in the rod

| Apply glue

| Press boss onto the wedge

| Drive the fiberglass rod into the hole

| Allow to cure

| Cut off the rod and sand

| Touch-up

**STEP 2 - STEP 11** 



| Verify alignment

STEP 12 CONCLUSION

#### INTRODUCTION

Damage to the boss can occur from improper operation, contact of the boom tip with the ground or another obstruction, excessive wear or damage to the wear pads, or by retracting the 3rd section with the pole guides out of the stored position.

Refer to the complete instructions below before ordering the field service kit Z-643 to determine if it can be repaired.

- Part number Z-643. Allow time for the kit to arrive, as the adhesive in the kit cannot be shipped by air
- If needed, the metal reinforcing strip and screws for your specific unit (by serial number) should be ordered at the same time as the repair kit.
- A 1-inch drill bit capable of drilling at least 6 inches.
- Drill motor capable of running a 1-inch drill bit.
- 36 grit sandpaper to rough up the fiberglass rod that is supplied in kit.
- A gun may be purchased as a means of applying the adhesive Terex P/N 65388929TU
- A clamp that is large enough to clamp the fiberglass boss to the remainder of the wedge while the adhesive cures.
- A hammer to insert the fiberglass rod into the drilled hole.
- A sander to trim the fiberglass rod after the adhesive sets up, and to make the repair ready for final finishing.
- · Sandpaper as needed for the sander.
- A gelcoat repair kit for the final finish of the repair.

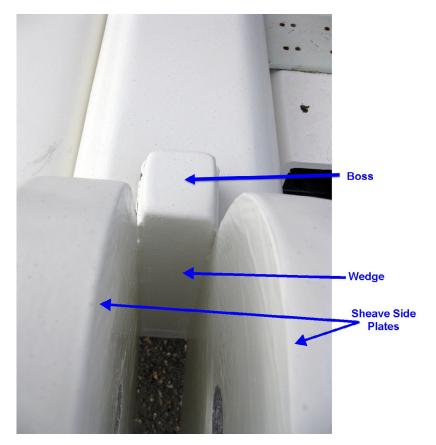


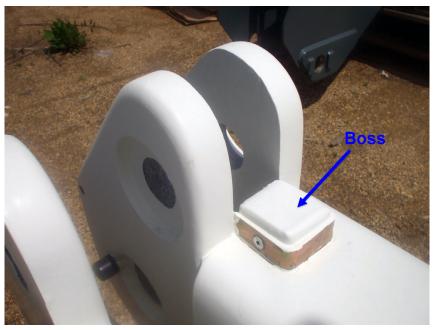
<sup>\*</sup>Photo is for reference only, actual gun may vary



#### INTRODUCTION

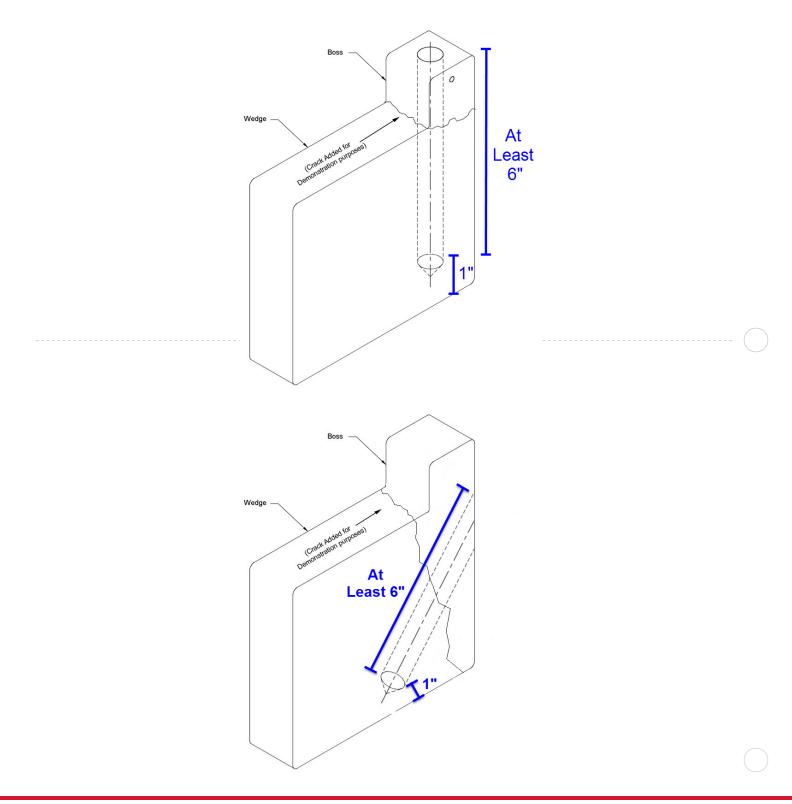
The boom tip area is made up of four components that are all bonded together. The components are the fiberglass boom tube, the left and right hand 'sheave side plates', and a spacer between the two side plates called a 'wedge'. The wedge is the component that has the boss on top of it.





#### STEP 1

Remove broken boss. Examine surrounding area to determine whether the damage is confined only to the area shown in the diagram below. If in doubt, consult your local Terex Utilities service center, dealer, or call 1-844-837-3948 and ask for technical support.



#### STEP 2

Clean up both the boss and wedge fiberglass and resin by sanding. Both surfaces need to be clean to allow the adhesive to bond.

#### STEP 3

Re-assemble the boss to the wedge, checking the fit to make sure it matches the original before clamping it in place.

#### STEP 4

Drill a 1-inch hole through boss into the wedge, perpendicular to the break. Leave 1 inch between the bottom of hole and the bottom of the wedge. Refer to the diagram(s) in Step 1.

Check fit of fiberglass rod in hole to allow room for glue to spread evenly and air to escape.

#### STEP 5

Put a small groove in the rod to allow it to be inserted when bonded. Rough up the fiberglass rod with sandpaper.

#### STEP 6

Remove clamp and boss. Load cartridge in the adhesive gun.

Coat the rod, bottom of the boss, hole in the wedge, and the top of wedge with glue.

#### STEP 7

Press boss onto the wedge.

#### STEP 8

Drive fiberglass rod into the hole. Clamp the boss and rod in place.

#### STEP 9

Let the adhesive cure for 24 hours (time based on an ambient temperature of 75°F).

#### STEP 10

Cut off the rod and sand off any excess adhesive and rod to match the original profile.

#### STEP 11

Touch up the repair with gelcoat.

#### **STEP 12**

Verify transfer pin alignment and transfer bracket storage alignment. The transfer piin must transfer between the storage hole and the 3rd pinning hole without using force. Make necessary modifications or adjustments to prevent damage.

### **CONCLUSION**

The finished repair will look similar to a new unit as shown below:





FOR FURTHER ASSISTANCE,
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM

PHONE: 1-844-TEREX4U (1-844-837-3948) | EMAIL: <u>UTILITIES.SERVICE@TEREX.COM</u>