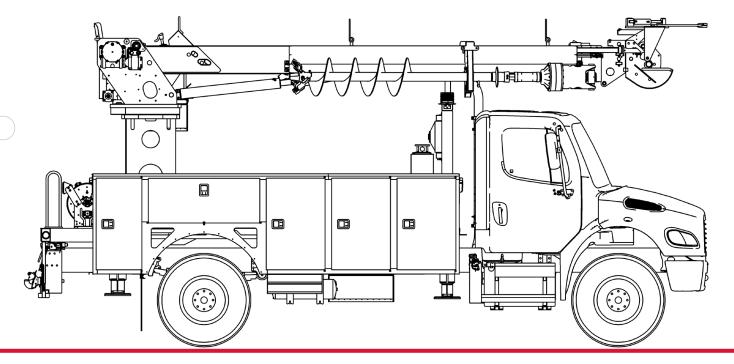


**REPLACING OIL IN A HYDRAULIC SYSTEM** 

NO.197





SERVICE CALL: REPLACING OIL IN A HYDRAULIC SYSTEM



MODEL(S):
ALL TEREX UTILITIES EQUIPMENT



TOOLS NEEDED: FILTERS

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## **WARNING**



#### **Injection Hazard**

Fluid escaping under pressure can penetrate skin and result in death or serious injury.



Relieve pressure before disconnecting hydraulic lines.

Stay clear of leaks and pin holes. Use a piece of cardboard or wood to search for leaks. Do not use hand.

Fluid injected into skin must be surgically removed within a few hours by a doctor familiar with this type of injury, or gangrene will result.



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#### **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.

#### INTRODUCTION

The following procedure outlines the steps required to replace all the oil in the system. One example of this would be changing the oil viscosity as the equipment is used in different climates. Another example of this would be removing oil contaminated with water. This procedure can be accomplished without disassembly.

If the system has experienced a severe contamination issue and has run for extended periods without changing the filters, then a full disassembly may be required.

#### STEP 1

If possible warm the oil up so that it flows easily. Set the unit up in an area where it can be fully operated and placed in the stowed position.

#### STEP 2

Drain and clean the hydraulic reservoir.

#### STEP 3

Inspect the suction strainer, cleaning if dirty and replacing if any damage is found.



All cylinders must be filled with oil before operation from the platform.

### STEP 4

Fill the reservoir with new oil to the proper level, filtering the oil prior to adding it to the reservoir.

### STEP 5

Disconnect all return hoses going into the top of the reservoir and filter. Place the hoses in an overflow barrel to capture the oil and prevent it from returning to the reservoir.

#### STEP 6

Monitor the pressure filters on the unit if equipped. If the indicator pops up, the filter is in bypass mode and must be replaced immediately.



Monitor the oil level in the reservoir, refilling as needed throughout the process with clean, filtered oil. No oil is returning to the reservoir during the flushing process.

#### STEP 7

Operate the pump at slow speed at the same time as a function is operated from the lower controls to cycle the old oil from the cylinder or lines and into the overflow barrel.

Cycle each function from the lower controls, starting with the outriggers. Then move on to each of the boom functions, extending and retracting the cylinder for each function.

Also cycle all other functions including the auxiliary power, material handling, tool circuits and leveling cylinders or systems



Monitor the oil level in the reservoir, refilling as needed throughout the process with clean, filtered oil. No oil is returning to the reservoir during the flushing process.

## STEP 8

When complete, install new filters, fill the reservoir to the proper level, and function test and cycle all systems to verify proper operation before operating from the platform (if equipped).



FOR FURTHER ASSISTANCE,
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM

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