TEREX®

Service Manual

Rubber Track Loader

PT-50/60

Part Number: 2030-634

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PT-60 Specifications

Engine

- Model: Perkins 404D-22 T
- Displacement: 2.2 liter
- Gross horsepower: 60 hp, 44.7 kW
- Torque: 140 lb-ft.190 Nm
- Idle rpm: 2800 (high idle); 1175 (low idle)
- Average water /thermostat temperature: 190°F, 87.8°C

Transmission

- Model: A22VG (38.5cc) tandem (Rexroth)

Drive pumps

- Displacement: 2.349 in^3/rev (38.5 cc/rev)
- Relief pressure: 5500 psi, 380 bar
- Flow: 28 gpm (106 lpm) @ 2800 rpm (high idle)

Charge pump

- Displacement: 1.098 in^3/rev (18 cc/rev)
- Relief pressure: 400-450 psi (2758-3103 kpa)

Drive Motors

- Model: Rexroth MCR 5 (2-speed)
- Displacement: 50 in^3/rev (820 cc/rev)

Control Handles

- Model: 4TH6 (Rexroth)

Auxiliary Pump

- Make: Haldex-Barnes #180-2061
- Displacement: 1.343 in^3/rev (22 cc/rev)
- Flow: 17.4 gpm (65.9 lpm) @ 2800 rpm (high idle)
- Relief pressure: 3000 psi (20,684 kPa)
- Cooling/filtering: Auxiliary oil is filtered and cooled at all times. In Auxiliary mode, the oil is filtered after the attachment to protect the machine if the attachment motor fails or contaminants are introduced from the quick couplers.

Loader Valve

- Model: Husco
- Relief pressure: 3000 psi (20,684 kPa)
- Pilot pressure required to move spools: 40-320 psi (275.8-2206 kPa)

Cooler

- Burst pressure: 400 psi (2757 kPa)
- Operating pressure: 250 psi (1724 kPa)
- Bypass relief pressure: 80 psi (689 kPa)
- Hot oil sending unit: 225°F (107.2°C)

Critical Torque Specs

- Transmission Mounting Bolts
  - 85 ft-lb. (230 Nm) w/Blue Loctite
- Drive Sprocket Drive Teeth Bolts
  - 105 ft-lb. (142 Nm) -Dry
- Wheel Axle Retaining Nut
  - 300 ft-lb. (407 Nm)-Dry
- Drive Sprocket Lug Nut
  - 129 ft-lb. (175 Nm)-Dry
- Drive Motor Mounting Bolts
  - 177 ft-lbs. (480 Nm) -Dry
- Center Idler Wheel Mounting Bolts
  - 105 ft-lbs. (142 Nm) -Dry

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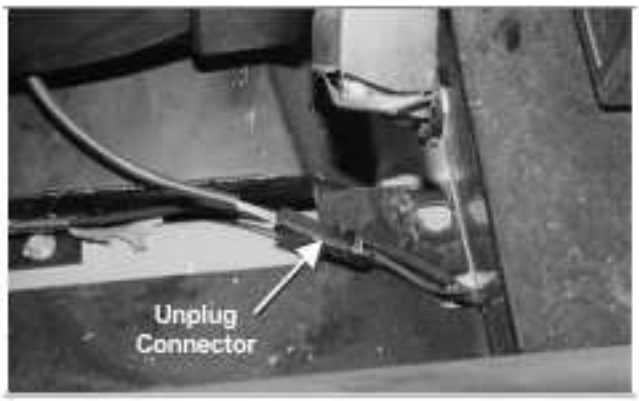


Figure 6-2

2. Tilt the seat forward and reach behind the seat to unplug the seat switch wiring harness.



Figure 6-3

3. Remove the seat. Be careful not to scratch the control panel or sides of the cab.

Seat Installation



Figure 6-4

1. With the seat mounts attached, place the seat in the cab. Be careful not to scratch the control panel or sides of the cab.

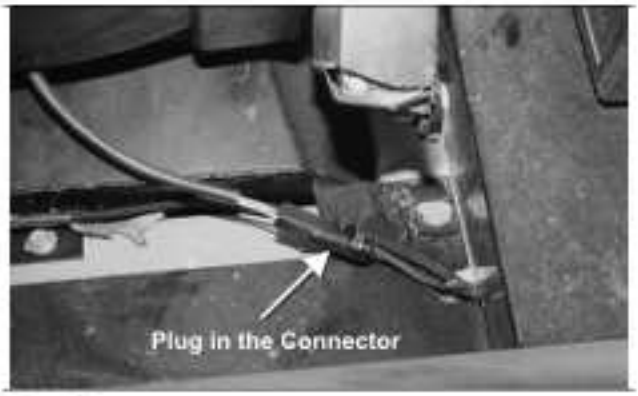


Figure 6-5

2. Tilt the seat forward and reach behind the seat to plug in the seat switch connector

Note: The machine will not operate unless the seat switch connector is plugged in.

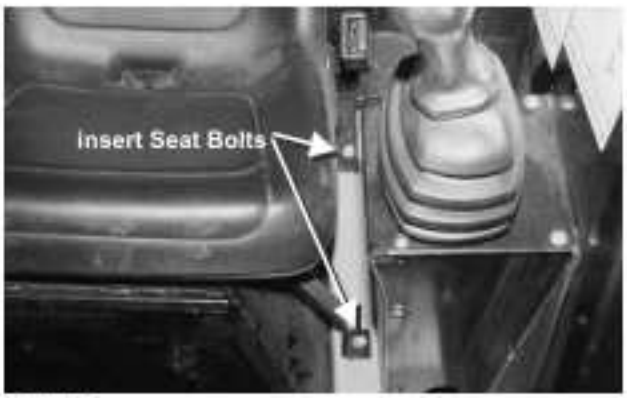


Figure 6-6

3. Position the seat so the holes in the seat mounts are aligned with the bolts in the frame. Install the four seat mount nuts and washers.

Fuel-Sending Unit Removal and Installation

The tools required for fuel sending unit removal and installation are listed in Table 6-2. Use manufacturer-recommended tools whenever possible.

Table 6-2

Required Tools
Screwdriver
Combination Wrench
Socket Wrench

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15. Troubleshooting

Chapter Overview

This chapter contains basic troubleshooting procedures for the Rubber Track Loader.

Additional troubleshooting aids are provided in *Chapter 3. System Diagrams* and in those chapters containing disassembly and assembly procedures for the appropriate component or assembly.

⚠ Personal Safety

Improper or incomplete maintenance/repair of a Rubber Track Loader can be dangerous and may result in machine damage, injury or death.

Do not attempt to perform any type of repair or maintenance on a Rubber Track Loader until you have read and fully understood the information in this manual.

Refer to the Operation and Maintenance manual for instructions regarding proper machine operation techniques before operating any Rubber Track Loader.

Prior to performing any type of service work on a Rubber Track Loader, read and understand Chapter 1 (Product Safety) for personal safety information.

⚠ Machine Preparation

Accidental machine starting can cause injury or death to personnel working on a Rubber Track Loader.

As a precaution, disconnect the battery cables from the battery terminals, tape the battery clamps and remove the key from the ignition switch prior to performing any service work on a Rubber Track Loader.

Place a "Do Not Operate" tag prominently on the machine to inform personnel that the machine is being worked on.

Preliminary Inspection

A simple visual inspection and operational check can identify many problems without the need for extensive troubleshooting. If these checks indicate a problem that requires further analysis, proceed to *Troubleshooting* in this section.

Visual Inspection

Prior to troubleshooting, do a walk-around and perform a visual inspection of the machine. Look for missing, loose or worn parts. Perform the following visual checks.

- Track tension
- Fluid levels
- Fan belt tension and condition
- Hoses (no visible sign of wear)
- Fittings (no leaks)
- Battery cables
- Fuse box (fuses in place and operational)
- Controls (for neutral)

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Figure 12-8

3. Press the button on top of the valve to release hydraulic pressure.



Figure 12-9

4. Remove and cap all hoses.



Figure 12-10

5. Remove the four bolts that secure the low-flow relief valve to the loader frame and remove the valve.

Quick Coupler Block / Pressure Release Valve Installation



Figure 12-11

1. Install the four bolts that secure the low-flow relief valve to the loader frame.



Figure 12-12

2. Install all hoses.

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⚠ Attachments

Only use attachments that are recommended by Terex.

Make sure that all necessary guards and protective equipment are in place and functioning prior to operating any attachment.

Wear protective glasses and protective equipment as required by conditions or as recommended in the attachment's operation manual.

> ⚠ **When replacement parts are required for your machine, use only genuine Terex replacement parts or parts that meet or exceed original specifications including, but not limited to physical dimensions, type, strength and material.**
>
> **Installing lesser components can lead to premature failures, product damage, personal injury or death.**

Ensure that all personnel are far enough away from the work area so they will not be struck by flying objects.

Stay clear of the cutting edges, pinching surfaces or crushing surfaces of the attachment while performing any attachment maintenance, testing or adjustments.

⚠ Machine Labels and Decals

Labels and decals placed on the machine provide safety information and operating instructions. Familiarize yourself with the location and significance of these labels to ensure your safety.

Product Identification Number

The Product Identification Number (PIN) is located on the left side of the firewall next to the operator seat. (figure 1-1). Always provide the PIN when contacting the dealer about parts, service, warranty or accessories. No warranty claims will be processed unless the PIN is provided.



1-1

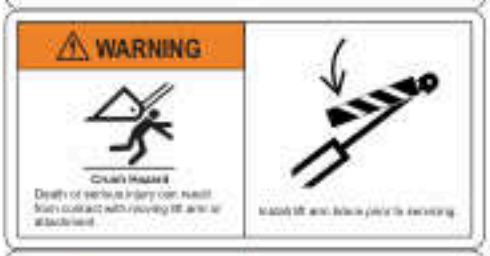
⚠ Safety Label Examples

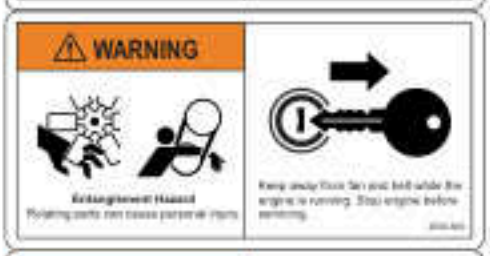
Examples of the labels and decals displayed on the machine are shown on this page.















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