1050RT | 1050RT (EU) | 1050RT X-Series

Compact Track Loader

Operator's Manual

50950436 Rev. H 05/21

Original Instructions

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Mustang 1050RT Compact Track Loader Operator Manual (50950436H)

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- Decals
- Specifications
- Indicators and Controls
- Operation
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- The machine may be moved with a raised load only if the path of the machine is level.
- Persons attaching or securing loads may only approach the machine from the side, after the operator has given permission. The operator may only give permission after the machine and the attachment are stationary.
- Do NOT use any lifting attachments (slings, chains) that are damaged or of inadequate rated capacity.

Parking the Machine

- When shutting down the machine for the day, plan ahead so the machine will be on a firm, level surface away from traffic and away from high-walls, cliff edges and any area of potential water accumulation or runoff. Lower the attachment and lift arm to the ground. There should be no possibility of unintended or accidental machine movement.
- If the machine must be parked on a slope, park across the slope and chock the tracks to prevent movement.
- To avoid collisions when parking on streets, use barriers, caution signs, lights, etc., so that the machine can be easily seen at night.
- After the machine has been parked properly, shut down the machine according to the “Mandatory Safety Shutdown Procedure” on page 18.

Electrical Energy

- Stay away from high-voltage lines. Electrocution can result from contact or proximity to high-voltage electric lines. The machine does not have to make physical contact with power lines for current to be transmitted. Use a spotter and hand signals to keep away from power lines not clearly visible to the operator.
- If the machine comes into contact with a live wire:
  - Do not leave the machine.
  - If possible, drive the machine out of the danger area.
  - Warn others not to approach or touch the machine.
  - Have the live wire de-energized.
  - Do not leave the machine until the wire has been safely de-energized.
- Depending upon the voltage in the power line and atmospheric conditions, strong electric shocks can occur if the machine is closer than 3 m (10 ft.) from the power line. Higher voltages and rainy weather can further increase the safe operating distance.
- Work on the machine’s electrical system must be performed only by trained technicians.
- Inspect and check the machine’s electrical equipment at regular intervals. Problems found, such as loose connections or scorched cables, must be repaired before using the machine.
- Only use proper, original equipment fuses/circuit breakers with the specified current rating. Turn off the machine immediately if there is any indication of a problem with the electrical system.

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R	Ground Clearance	191 mm (7.5 in.)
S	Track Gauge	1039 mm (40.9 in.)
T	Track Shoe Width	249 mm (9.8 in.)
U	Crawler Base	1283 mm (50.5 in.)
V	Overall Width (w/o Bucket)	1290 mm (50.8 in.)
W	Bucket Width	1372 mm (54.0 in.)
X	Clearance Radius – Front (with Bucket)	1854 mm (73.0 in.)
Y	Clearance Radius – Front (w/o Bucket)	1168 mm (46.0 in.)
Z	Clearance Radius – Rear (w/o Counterweight)	1290 mm (50.8 in.)

Table 3 - Dimensions (9.8 ft3 (0.28 m3) Bucket)

Payloads/Capacities

NOTE: *Pallet fork load center is the distance from the front face of the forks to the center of mass of the load.*

Dirt / Construction Buckets	**Weight**	**Rated Operating Capacity**
1372 mm/0.28 m³ (54.00 in./9.8 ft³	129 kg (285 lbs.)	476 kg (1050 lbs.)
1524 mm/0.31 m³ (60.00 in./11.0 ft³	138 kg (305 lbs.)	467 kg (1030 lbs.)
1549 mm/0.33 m³ (61.00 in./11.6 ft³	141 kg (310 lbs.)	465 kg (1026 lbs.)
Pallet Forks	**Weight**	**Rated Operating Capacity**
406.4 mm (16.00 in.) Forks with Backrest Rating per EN474-3	213 kg (470 lbs.)	319 kg (704 lbs.)
508 mm (20.00 in.) Forks with Backrest Rating per EN474-3	213 kg (470 lbs.)	229 kg (660 lbs.)
609.6 mm (24.00 in.) Forks with Backrest Rating per SAE J1197	213 kg (470 lbs.)	281 kg (620 lbs.)

1. Measured on firm and level ground. Equipped with full fluids and 75 kg (165 lbs.) operator.

Table 4 - Payloads and Capacities

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Run-In Period

The performance and service life of the machine is heavily dependent on using the machine carefully during its first 100 operating hours.

• Do not operate machine at the maximum rated operating capacity.

• Do not run the engine at a high speed for extended periods of time.

• Increase the load gradually while varying the engine speed.

Follow the maintenance schedule. See"Fig. 20 - Ignition Switch" on page 64.

Stopping the Engine

Perform the "Mandatory Safety Shutdown Procedure" on page 16.

⚠ CAUTION

Do not stop the engine at full throttle. Damage to the engine and engine turbocharger can result. Allow the engine to idle for approximately 1 minute before shutting it off.

Engine Stalling

⚠ WARNING

If the engine should stall for any reason during operation, always turn the ignition key all the way counter-clockwise to the "OFF" position before re-starting the engine according to"Starting the Engine" on page 63.

Safety Interlock System (Hydraloc™)

⚠ WARNING

NEVER defeat the safety interlock system by mechanically or electrically bypassing any switches, relays or solenoid valves.

An interlock system is used on the machine for operator safety. Together with solenoid valves, switches and relays, the interlock system:

• Prevents the engine from starting unless the operator is sitting on the seat and the operator restraint bar is down.

• Disables the lift arm, attachment tilt and wheel drives when the operator leaves the seat, turns the key switch to OFF or raises the restraint bar.

• Disables auxiliary hydraulic system when the restraint bar is raised or the key switch is OFF.

Testing the Safety Interlock System

Before leaving a parked machine, check the safety interlock system for proper operation:

Restraint Bar

With the engine running, raise the restraint bar. Move each of the controls. There should be not more than a slight movement of the lift arm, attachment and machine. If there is any significant movement, troubleshoot and correct the problem immediately. Contact your dealer if necessary.

Seat Switch

With the engine off and the restraint bar lowered, unfasten the seatbelt. Lift your weight up off the seat. Try to start the engine. If the engine starts, turn off the engine, and troubleshoot and correct the problem. Contact your dealer if necessary.

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Fig. 35 - Auxiliary Hydraulic Circuit Connections

The hydraulic couplers are located on the left lift arm. “A” port is pressure (A, Fig. 35) “B” port is return (B, Fig. 35)when the auxiliary control is in the detent position.

Connecting Hydraulic Attachments to the Auxiliary Hydraulic Circuits

IMPORTANT: *Connect hydraulically-powered attachment hoses to the auxiliary circuits after the attachment is secured to the hitch*

Disconnect hydraulically-powered attachment hoses from the auxiliary circuits before removing the attachment from the hitch.

1. Empty the attachment and lower it to the ground.
2. Shut off the engine and turn off the ignition. Remove the ignition key and take it with you.
3. Raise the restraint bar.
4. Clean the hydraulic connections on the hoses and the connections.
5. Relieve the pressure in the standard auxiliary hydraulics circuit.
6. Push the hose connections firmly onto the auxiliary hydraulic connections until they snap into place.

⚠ CAUTION

Route the hydraulic hoses so they do not get pinched when the attachment is tilted forward and back. Damaged or burst hydraulic hoses could result.

IMPORTANT: *Always check hydraulic function of the attachment before use, to make sure the hydraulic hoses have not been installed in reverse.*

NOTE: *Pressure buildup caused by heat in hydraulic attachments left in direct sunlight can make it difficult to connect the quick-couplers to the fittings on the attachment.*

Disconnecting Hydraulic Attachments from the Auxiliary Hydraulics Circuits

1. Empty the attachment and lower it to the ground.
2. Shut off the engine and turn off the ignition. Remove the ignition key and take it with you.
3. Raise the restraint bar.
4. Relieve the pressure in the standard auxiliary hydraulics circuit.
5. Push on the hose connection locking rings until the hose connections release.

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6. Raise the restraint bar to disable the hydraulic controls.
7. Switch off all electrical switches.
8. Unfasten the seat belt, remove the ignition key and take it with you.
9. Ensure the machine cannot be operated after shutdown until further disposal.
10. Ensure no environmentally hazardous materials, fluids and/or fuel can escape the machine. Specifically check for leaks from the engine, the hydraulic system and the coolant system.
11. Ensure the machine poses no dangers in the place where it is standing.
12. Remove any dirt and/or debris from the engine compartment, the chassis and the cylinder rod surfaces.
13. Remove the battery.
14. Lock the cab door, the storage compartment, the battery and hydraulic filler compartments and the engine compartment. Remove the key(s) and take it/them with you.

Machine Disposal

Make sure all materials are disposed of in an ecologically sound manner.

Recycle the machine in accordance with the current state of the art at the time of recycling. Observe all accident prevention regulations.

Dispose of all parts at the recycling sites specific to the material of the part. Take care to separate different materials for recycling.

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1. Park the machine with one of the travel motor drain/fill hole plugs (O, Fig. 75) at the bottom.
2. Perform the "Mandatory Safety Shutdown Procedure" on page 16.
3. Position a waste oil collection container with a 1 quart/liter (+ 0.10 quarts/liters) underneath the drain/fill hole plug and remove the lower plug.

IMPORTANT: *Always dispose of hydraulic fluids according to environmental laws or take to a recycling center for proper disposal. DO NOT pour onto the ground or down a drain.*

4. Remove a second plug near the top.
5. Remove the drain/fill hole plug and allow the oil to drain completely.
6. Reinstall the lower drain/fill hole plug. Tighten securely.
7. Through the top drain/fill plug, fill the travel motor front case with the same grade and type oil used in the hydraulic system. Each travel motor requires 345 - 375 ml (0.36 - 0.39 qt.) of hydraulic oil.
8. Reinstall the upper drain/fill hole plug. Tighten securely.
9. Test the drive system and check for leaks.

Tracks

Track Maintenance

Inspect the tracks daily for damage and wear.

IMPORTANT: *To avoid damaging the tracks and to ensure maximum track life, refer to "Rubber Track Use Cautions and Tips" on page 72.*

Observe the following conditions to extend track life:

• Avoid traveling or turning on broken stone, jagged rock, metal or other material that could damage or cut the tracks.

• Avoid traveling on riverbeds or areas with soft rocks that could become stuck in the tracks, which could cause damage to the tracks or cause the tracks to slip off.

• Avoid using the machine on the seashore. Sea salt can corrode the metal cores inside the tracks.

• Immediately wipe any spilled fuel, oil, salt or chemical solvents off of the tracks, as these substances can corrode the coupling in the metal cores in the tracks, causing corrosion and peeling.

Avoid traveling on freshly paved roads or on hot surfaces (e.g. fires, metal sheets exposed to direct sunlight, etc.). Hot surfaces can damage the lugs or cause irregular wear.

Avoid moving earth in area where the tracks may slip, which can cause excessive lug wear.

Track Replacement

⚠ WARNING

Keeps hands clear from between the track and the idler when installing tracks. Crushing of body parts and amputation can result.

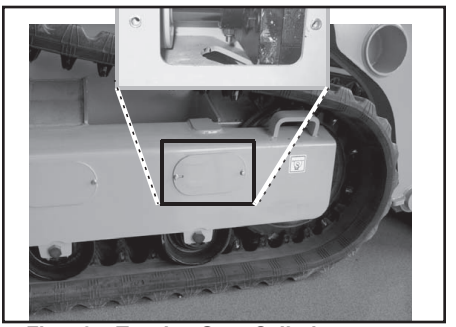


Fig. 76 - Tension Stop Cylinder

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Torque Specifications

NOTE: *Use these torque values when tightening hardware (excluding: locknuts and self-tapping, thread forming and sheet metal screws) unless specified otherwise.*

Hydraulic fittings with various seals (light application). All torque values are in Nm (lb.-ft.) unless marked otherwise.					
Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M10X1.0	9 (7)	18 (13)	15 (11)	18 (13)	10 mm (0.4 in.)
M12X1.5	20 (15)	25 (18)	25 (18)	25 (18)	12 mm (0.5 in.)
M14X1.5	35 (26)	45 (33)	26 (35)	35 (26)	14 mm (0.6 in.)
M16X1.5	45 (33)	55 (41)	40 (30)	50 (37)	16 mm (0.6 in.)
M18X1.5	55 (41)	70 (52)	45 (33)	70 (52)	18 mm (0.7 in.)
M22X1.5	65 (48)	125 (92)	60 (44)	125 (92)	22 mm (0.9 in.)
M27X2.0	90 (66)	180 (133)	100 (74)	145 (107)	27 mm (1.0 in.)
M33X2.0	150 (111)	310 (229)	160 (118)	210 (155)	33 mm (1.3 in.)
M42X2.0	240 (177)	450 (332)	210 (155)	360 (266)	42 mm (1.7 in.)
M48X2.0	290 (214)	540 (398)	260 (192)	540 (398)	48 mm (1.9 in.)
G1/8A	9 (7)	13 (18)	15 (11)	18 (13)	9.73 mm (0.4 in.)
G1/4A	35 (26)	35 (26)	30 (22)	35 (26)	13.16 mm (0.5 in.)
G3/8A	45 (33)	70 (52)	45 (33)	50 (37)	16.66 mm (0.7 in.)
G1/2A	65 (48)	90 (66)	55 (41)	65 (48)	20.96 mm (0.8 in.)
G3/4A	90 (66)	180 (133)	100 (74)	140 (103)	26.44 mm (1.0 in.)
G1A	150 (111)	310 (229)	160 (118)	190 (140)	33.25 mm (1.3 in.)
G1 1/4A	240 (177)	450 (332)	210 (155)	360 (266)	41.91 mm (1.7 in.)
G1 1/2A	290 (214)	540 (398)	260 (192)	540 (398)	47.80 mm (1.9 in.)

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