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1350RT
1350RT (EU)
1350RT X-Series



Compact Track Loader

Operator's Manual

50950468 Rev. G 05/21

Original Instructions

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Mustang 1350RT Compact Track Loader Operator Manual (50950468G)

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Models: 1350RT

Machine: Compact Track Loader

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Main contents

- DELIVERY CHECKLISTS
- INTRODUCTION
- SAFETY
- DECALS
- SPECIFICATIONS
- INDICATORS AND CONTROLS
- OPERATION
- LUBRICATION
- MAINTENANCE
- TROUBLESHOOTING

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Sample pages follow. Full manual: machinecatalogic.com

Component Identification

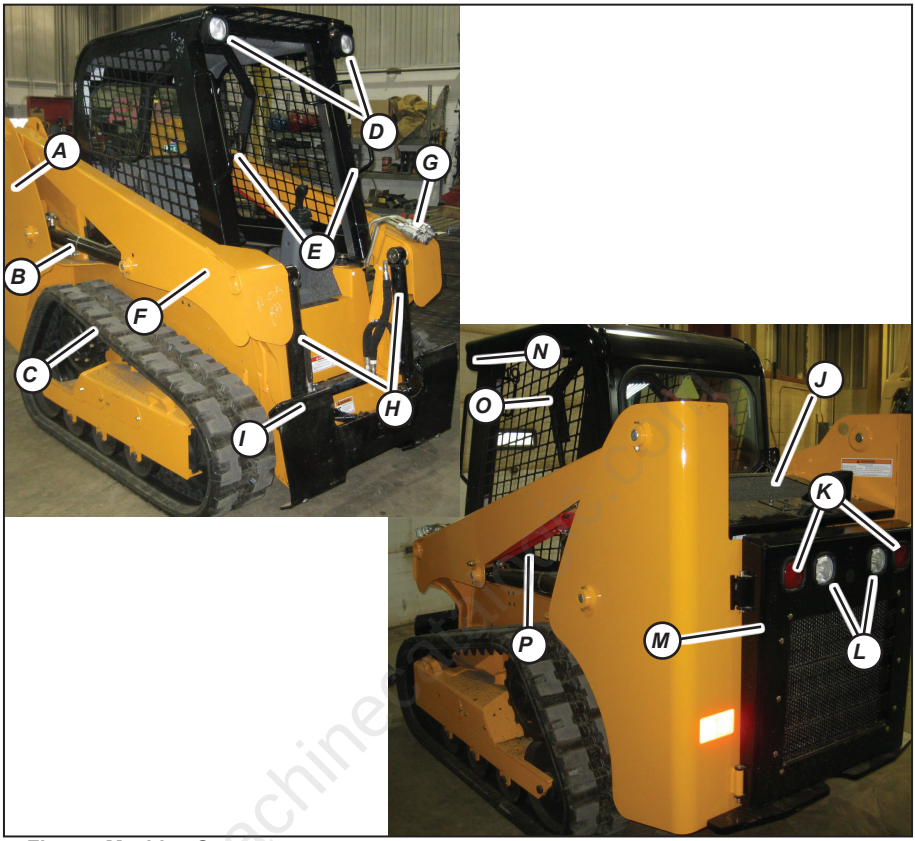


Fig. 5 - Machine Components

Table 1 - Component Identification

Item	Description		Item	Description
A	Upright		I	Attachment Bracket
B	Lift Cylinder		J	Engine Cover
C	Tracks		K	Tail Lights
D	Front Work Lights		L	Rear Work Lights
E	Hand holds		M	Rear Door
F	Lift Arm		N	Roll-Over/Falling Object Protective Structure (ROPS/FOPS)
G	Auxiliary Hydraulic Couplers		O	Restraint Bar
H	Tilt Cylinders		P	Lift Arm Support Device

Indicator and Operation Symbols

 *Power Off*	 *Power On*	 *Engine Start*	 *Battery Charge*	 *Electrical Power*
 *Worklight w/Tail Lights*	 *Worklight*	 *Safety Alert*	 *Hazard Flasher*	 *Fasten Seatbelt*
 *Horn*	 *Read Operator's Manual*	 *Volume - Full*	 *Volume - Half Full*	 *Volume - Empty*
 *Parking Brake*	 *Engine Air Filter*	 *Engine Oil*	 *Engine Oil Filter*	 *Engine Oil Pressure*
 *Fuel Filter*	 *Engine Temperature*	 *Hydraulic System*	 *Hydraulic Oil Temperature*	 *Hydraulic Oil Filter*
 *Grease Lubrication Point*	 *Glow Indicator Lamp*	 *Diesel Fuel*	 *Clockwise Rotation*	 *Counterclockwise Rotation*
 *Fast*	 *Slow*	 *Ride Control*	 *Engine Malfunction Shutdown*	 *Bucket - Float*
 *Bucket - Rollback*	 *Bucket - Dump*	 *Lift Arm - Lower*	 *Lift Arm - Raise*	 *Service Hours*

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Specifications

	1350RT
Shipping Weight[2]	2690 kg (5930 lbs.)

1. Equipped with standard bucket, driver and full fluids.
2. Without operator and driver; 10% fuel.
3. Operating mass and a full bucket.

Coolant Compound Table

Table 7 - Coolant Compound Table

Outside Temperature	Water	Anti-corrosion agent		Antifreeze
Up to °F (°C)	% by volume	in^3/gal (ccu. m./L)	% by Volume	% by volume
39 (4)	99	2.6 (10)	1	-
14 (- 10)	79			20
-4 (- 20)	65			34
-13 (- 25)	59			40
-22 (- 30)	55			45
-44 (-42)	50			50

Tracks

Table 8 - Tracks

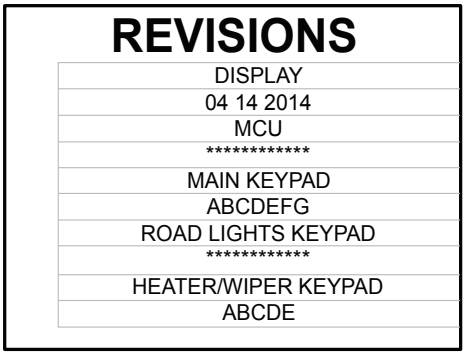
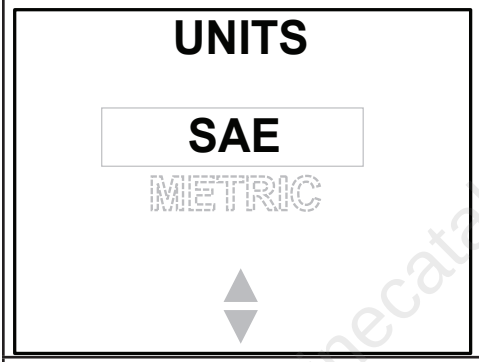
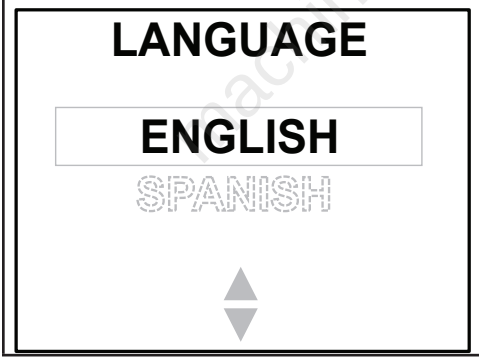
	1350RT
Tractive Effort (Theoretical)	3248 kg (7160 lbs)
Parking Brake	Spring Applied/Hydraulically Released
Grade-ability	30°
Track Type/Track Rollers/Roller Type	Rubber/4/Steel
Ground Pressure	0.41 Bar (6.0 psi)

Engine

Table 9 - Engine

	1350RT
Engine Make	Yanmar
Engine Model	4TNV88C-KMSV/ST5 (DPF) / 4TNV88-BKMSR2 /IT4XPT (Non-DPF)
Design	In-line 4 cylinder, 4-stroke diesel, naturally aspirated
Exhaust Emission Compliance (DPF) / Non-DPF)	EPA Tier 4, EU Stage 5 (DPF) / EPA Interim Tier 4, Stage 3A (Non-DPF)
Applied Regulation	EPA Tier 4 / EU Stage 5
Displacement	2.19 L (133.6 in^3)
Bore and Stroke	88 x 90 mm
Compression Ratio	19.1:1

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Display Mode	Description
	Revision Screen Displays information center electronic display software information.
	Units Screen Press the top/bottom of navigation rocker button (M,) to switch between SAE or metric units for values displayed in screens.
	Language Screen The press the top/bottom of navigation rocker button (M,) to switch between English or Spanish language for values displayed in screens.

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Joystick Controls

The machine s equipped with joystick controls. On joystick-equipped machines, the left joystick controls the travel drive, and the right joystick controls the attachment lift and tilt.

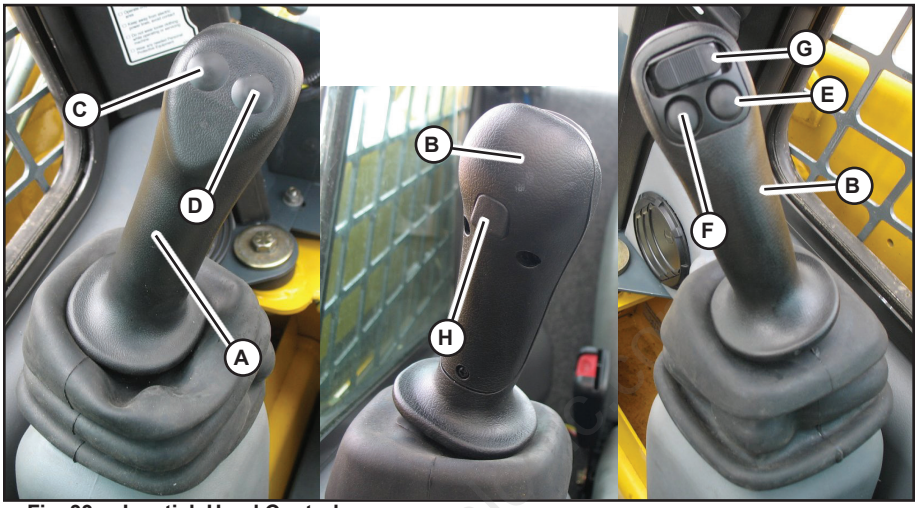


Fig. 33 - Joystick Hand Controls

Table 21 - Joystick Control Functions

Ref.	Control	Description
A	Left Joystick	Controls drive forward, reverse, turn, and speed.
B	Right Joystick	Controls lift arm raise/lower, float, and attachment tilt.
C	Two-Speed Selection Button	Not available on 1350RT machines.
D	Horn Button	Activates horn.
E	Hydraglide™ Button	Activates Hydraglide™.
F	Float Button	Activates Float.
G	Auxiliary Hydraulics Rocker Switch	Controls auxiliary hydraulics flow direction and amount.
H	Auxiliary Hydraulics Continuous Flow Latch Trigger	Works with Auxiliary Hydraulics Rocker Switch to latch/ unlatch auxiliary hydraulics continuous flow.

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Camera Observation System

A camera observation system is optionally available on all models. The camera observation system utilizes a rear-facing camera mounted within the rear door of the machine to provide full visibility to the region behind the machine of which portions of that region may otherwise be masked by the machine's structure.

The camera system is configured to turn on automatically when the machine's ignition switch is moved to the "ON" position. The camera image is displayed on the monitor which is centered above the front door opening of the operator's compartment.

The vertical viewing angle of the monitor is adjustable by loosening the knobs positioned on either side of the monitor. Prior to operating the machine the operator should check the monitor to verify that the monitor is positioned at the optimum viewing angle for them.

As an integral safety feature of the machine it is important for the operator to verify that the camera system is operating properly prior to moving the machine. A camera system that is operating properly will display a sharp image that is free of any obstructions when the key is switched on. The displayed image should be centered on the area directly behind the machine. If the displayed image does not meet this criteria the following system checks can be made:

1. While the system is configured to power up automatically upon key on, depress the system power button at the display to see if the system powers up.
2. Verify that the electrical connections to the monitor and camera are intact. This includes checking the A/V cable connection into the rear of the monitor and the camera connection to the camera extension cable located in the engine compartment in close proximity to the rear door hinges.
3. Roll back the ROPS/FOPS and check the camera system harness connections forward of the engine flywheel housing. The connection of the camera system power harness to the accessory power connections in the chassis harness are located in this region. Verify that these connections are intact.
4. Remove the right A-pillar cover within the ROPS/FOPS and locate the fuse holder in the camera system power harness located therein. Verify that the two Amp fuse within is intact and fully inserted into the fuse holder terminals.
5. If the monitor displays a picture but that picture is not bright and clear, verify that the camera lens is clean and that the camera is properly aligned with the aperture in the rear door. The mounting brackets allow for left/right, up/down, and fore/aft adjustment. When making adjustments, ensure that the resulting pictures displayed on the monitor squarely shows the area behind the loader.

Additional troubleshooting measures are detailed in the camera observation system manual for instructions on how to correct any issues.

IMPORTANT: *If the camera system is not able to be made functional after these initial checks, contact your dealer for service. A camera system that is unable to provide a clear image of the rear of the machine should be considered disabled and the machine should not be operated until the camera is made to function properly again.*

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Chapter 8

MAINTENANCE

Maintenance Schedule

This Maintenance Interval Chart was developed to match the Service chapter of this manual. Detailed information on each service procedure can be found in the Service chapter. A Maintenance Log follows the chart for recording the maintenance performed.

Recording the 10-hour (or daily) service intervals would be impractical and is therefore not recommended.

IMPORTANT: *Under severe operating conditions, more frequent service than the recommended intervals may be required. You must decide, based on your use, if your operation requires more frequent service.*

Maintenance Interval

Table 22 - Inspection, Checks and Cleaning

Service Procedure	Maximum Interval		
	10 Hours (or Daily)	250 Hours	500 Hours (or Yearly)
Remove foreign material	X		
Check engine air cleaner restriction indicator	X		
Check for loose or missing parts; repair/replace if necessary.	X		
Check engine oil level and condition	X		
Check fuel level and fill if necessary.			
Check hydraulic oil level and condition	X		
Check coolant level and condition	X		
Check cooling system for dirt and debris	X		
Check water separator, drain water, if present.	X		
Check windshield washer system and wiper blade, if applicable.	X		
Inspect tracks for damage/wear.	X		
Check bucket cutting edge.	X		
Test safety interlock system.	X		
Check hydraulic cylinder piston rods for damage/wear, clean if necessary.	X		
Check ROPS/FOPS structure - all fasteners must be installed and tightly secured.	X		
Check hydraulic hoses and tubes for cracks and/or debris.	X		
Grease hitch, hitch-related cylinder pivots and latch pins.	X		
Grease lift arm pins.	X		
Check sprocket fastener torque.	X		X
Inspect for sprocket wear.		X	
Check alternator/fan belt tension and condition.		X	
Check battery.			X
Check engine mounting hardware.			X

Table 23 -

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Problem	Possible Cause	Corrective Action
Jerky lift arm and bucket action	Seat or restraint bar switch malfunction	Contact your dealer.
	Air in the hydraulic system	Cycle lift / tilt cylinders to maximum stroke and maintain pressure for a short time to clear air from system.
	Oil in hydraulic reservoir is low	Check and add oil.
Bucket drifts downward with tilt control in neutral	Oil leaking past tilt cylinder seals (internal or external)	Contact your dealer.
	Self-leveling valve is malfunctioning	Contact your dealer.
	Leaking hydraulic hoses, tubes or fittings between control valve and cylinders	Inspect hoses and tubes, tighten fittings. Replace hoses or tubes as needed.
No down pressure on the bucket	Control valve is in its float position	Take control out of float position.
	Tilt cylinders are malfunctioning	Contact your dealer.
	Relief valve in control valve not functioning correctly (squealing noise should be evident while operating.)	Contact your dealer.
Bucket will not tilt, lift arm work properly	Tilt solenoid valve malfunctioning	Check electrical connections to the tilt solenoid and repair connections as needed. If tilt solenoid valve is still not functioning properly, contact your dealer.
	Tilt spool in control valve not actuated or leaking	Check valve control linkage and / or tube connections to valve.
Slow or no response for bucket tilt, lift works properly (Hand/Foot machines only)	Pilot control lines have air in them	Bleed pilot control lines from the main control valve.
	Low charge pressure	Contact your dealer.
	Linkage mis-adjusted between right foot pedal and pilot valve	Readjust for full travel without restriction.
Lift arm does not raise, bucket tilt work properly	Lift solenoid valve cold be malfunctioning	Check electrical connections to the lift solenoid and repair connections as needed. If lift solenoid valve is still not functioning properly, contact your dealer.
	Lift spool in control valve not actuated or leaking.	Contact your dealer.
Lift arm doesn't maintain raised position with lift control in neutral	Oil leaking past lift cylinder seals (internal or external)	Contact your dealer.
	Oil leaking past lift spool in control valve	Contact your dealer.
	Self-leveling valve malfunctioning	Contact your dealer.
	Leaking hydraulic hoses, tubes or fittings between control valve and cylinders.	Inspect hoses and tubes, tighten fittings as needed. Replace as needed.
Lift arm will not lower or raise	Lift arm support device engaged	Raise lift arm and disengage support device.
	Lift solenoid valve malfunctioning	Check electrical connections to solenoid. Repair or replaced as needed.
	Restraint bar not lowered.	Lower the restraint bar.
	Seat or restraint bar switch malfunction	Check electrical connections to the switch. Replace switch as needed.

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Full Version Available

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Mustang 1350RT Compact Track Loader operator manual 50950468 Rev. G, May 2021: safety, specs, maintenance, error codes, troubleshooting. Instant PDF download.

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