SR130 SR250
SR160 SV185
SR175 SV300
Tier 4

Alpha Series Skid Steer Loader

TR320
TV380
Tier 4

Alpha Series Compact Track Loader

OPERATOR'S MANUAL

Part number 47408100
1st edition English
March 2014

CASE CONSTRUCTION

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Tier 4 Skid Steer Loader Operator's Manual | Publication 47408100
Order the manual at mid-west-tech.com >

Contents

1 GENERAL INFORMATION

Note to the Owner 1-1
Declaration of conformity 1-3
Electro-Magnetic Compatibility (EMC) 1-6
Right, left, front and rear of the machine 1-7
Product Identification Number (PIN) 1-8
Machine components 1-11
Emissions overview 1-12

2 SAFETY INFORMATION

Signal word definitions 2-1
Safety rules 2-2
Airborne noise emission 2-7
Utility safety 2-9
Proper entry and exit 2-10
Starting and stopping precautions 2-12
Seat belt precautions 2-13
Specific precautions to this machine 2-15
Operating precautions 2-16
Maintenance precautions 2-18
Transporting precautions 2-18
Fuel handling precautions 2-19
Burn prevention 2-19
Fire extinguisher 2-20
Roll Over Protective Structure (ROPS) 2-21
Welding on the machine 2-22
Mechanical lift arm lock procedure - Radial lift machines 2-23
Mechanical lift arm lock procedure - Vertical lift machines 2-25
No engine power - Lift arm down control 2-27
Emergency exit 2-28
Machine safety sign information 2-29
Safety signs 2-30

3 CONTROLS AND INSTRUMENTS

ACCESS TO OPERATOR'S PLATFORM

Door latches, cab 3-1
Window glass, cab 3-2
Windshield wiper and washer controls 3-3
Cab air louvers 3-4

OPERATOR'S SEAT

Standard seat 3-5
Mechanical suspension seat 3-5
Air seat 3-5

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

Seat belt operation 3-6
Shoulder belt 3-7
Restraint bar 3-7

MECHANICAL HYDRAULIC CONTROLS

Steering and travel 3-8
Moving the machine 3-8
Turning the machine 3-9
Lift arm and bucket controls 3-10
Hand controls 3-10
Foot controls 3-11

ELECTRO-HYDRAULIC CONTROLS

Control pattern overview 3-12
Standard H control pattern 3-12
Standard ISO control pattern 3-13
Electro-hydraulic control handle adjustment 3-13
H control pattern steering and travel 3-14
Left-hand control lever 3-14
Right-hand control lever 3-14
Moving the machine 3-15
Turning the machine 3-16
H control pattern lift arm and bucket controls 3-17
Lift arm raise/lower control 3-17
Bucket curl/dump control 3-18
ISO control pattern steering and travel 3-19
Moving the machine 3-19
Turning the machine 3-20
ISO control pattern lift arm and bucket controls 3-22
Lift arm and bucket controls 3-22

CONTROL HANDLES

Switch configurations 3-23
Two speed function 3-28

AUXILIARY HYDRAULICS

Standard auxiliary hydraulics 3-29
High flow auxiliary hydraulics 3-30
Enhanced High Flow (EHF) auxiliary hydraulics 3-31

INSTRUMENT CLUSTER

Electronic Instrument Cluster (EIC) 3-32
Advanced Instrument Cluster (AIC) 3-37
Instrument cluster 3-42
Left column switch identification 3-61
ISO or H pattern control switch 3-63
Machine lights 3-64

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

4 OPERATING INSTRUCTIONS

COMMISSIONING THE UNIT

Operating Instructions 4-1

STARTING THE UNIT

Engine operation 4-3
Operating in extreme temperatures 4-5
Throttle control 4-6

STOPPING THE UNIT

Parking the machine and stopping the engine 4-7
Booster battery procedure 4-8

MOVING THE UNIT

Machine operation 4-9

5 TRANSPORT OPERATIONS

SHIPPING TRANSPORT

Transporting the machine 5-1

RECOVERY TRANSPORT

Moving a disabled machine 5-5

6 WORKING OPERATIONS

GENERAL INFORMATION

Mechanical attachment mounting systems 6-1
Hydraulic attachment mounting systems 6-4
Field operation 6-6

7 MAINTENANCE

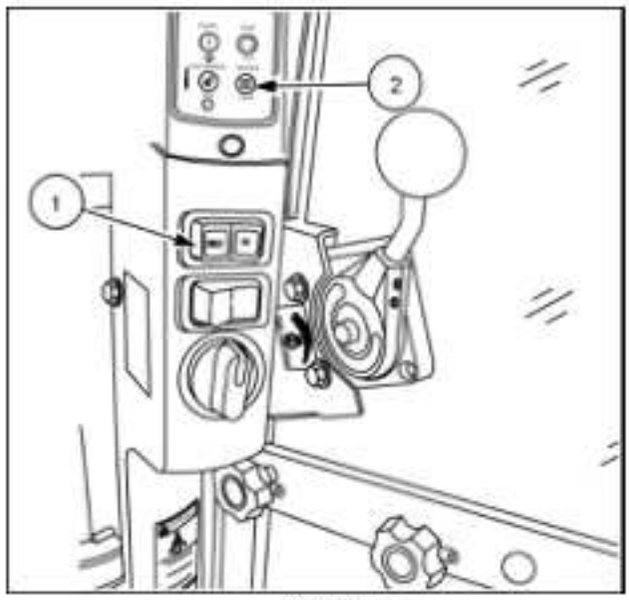
GENERAL INFORMATION

General safety before you service 7-1
General specification - Biodiesel fuels - Biodiesel fuels 7-3
Lubrication analysis program 7-5
Plastic and resin parts 7-5
Ecology and the environment 7-5
Tilting operator's compartment forward 7-6
Machine cleaning 7-10
Window removal and cleaning 7-11
Cab door removal and installation 7-13
Battery safety - check and cleaning 7-14
Fire extinguisher 7-16
Engine hourmeter 7-16
Wheels and tires 7-17

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

ISO or H pattern control switch

On machines with **ISO or H** drive, switch **(1)** determines which drive system the machine is operating. **ISO** drive (single lever controls drive) or **H** drive (traditional 2 lever drive control).



93103T534A 1

Switching from ISO to H pattern

1. Make sure the machine is parked on level ground with the engine running at idle, and lower the loader lift arms to the ground.
2. Press the **OPERATE** button **(2)** to stop all hydraulic functions. Confirm that the **AUX** roller switch in the right-hand handle is in the neutral position.

   NOTE: *The **AUX** roller switch must be in neutral to change the pattern.*
3. Push and hold the **ISO - H** pattern select switch **(1)** to desired pattern for a few seconds, an audio alarm will sound letting you know that the pattern switch was successful.
4. Then confirm that the control pattern switch occurred by referencing the text display. Plus the switch will illuminate only on the selected side.
5. Then activate the hydraulic system by pressing the **OPERATE** button **(2)**.

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

EVERY 250 HOURS

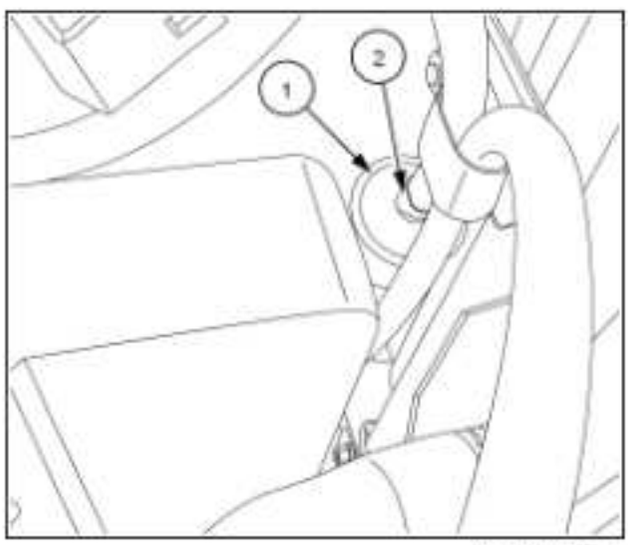
In-line fuel filter

The in-line fuel filter **(1)** should be replaced every 250 hours of operation. Perform this procedure only when all machine components are cool.

Models SR130 and SR160 only

Removal

1. Place the machine on a firm, level surface.
2. Open the engine hood and rear service door. Engage the rear service door latch located near the lower hinge. The in-line fuel filter is located to the right near the coolant reservoir.
3. Loosen and slide the clamps **(2)** away from both sides of the in-line fuel filter **(1)**.
4. Grab the fuel hose with one hand and the filter with the other. Twist and pull away from each other to remove the filter from the hose. Repeat procedure for the other side.



Installation

1. Grab the fuel hose with one hand and the filter with the other. Push the fuel hose onto the fuel filter. Repeat procedure for the other side.

NOTE: *Be sure the arrow marked on the filter is facing in the same direction as the old filter.*

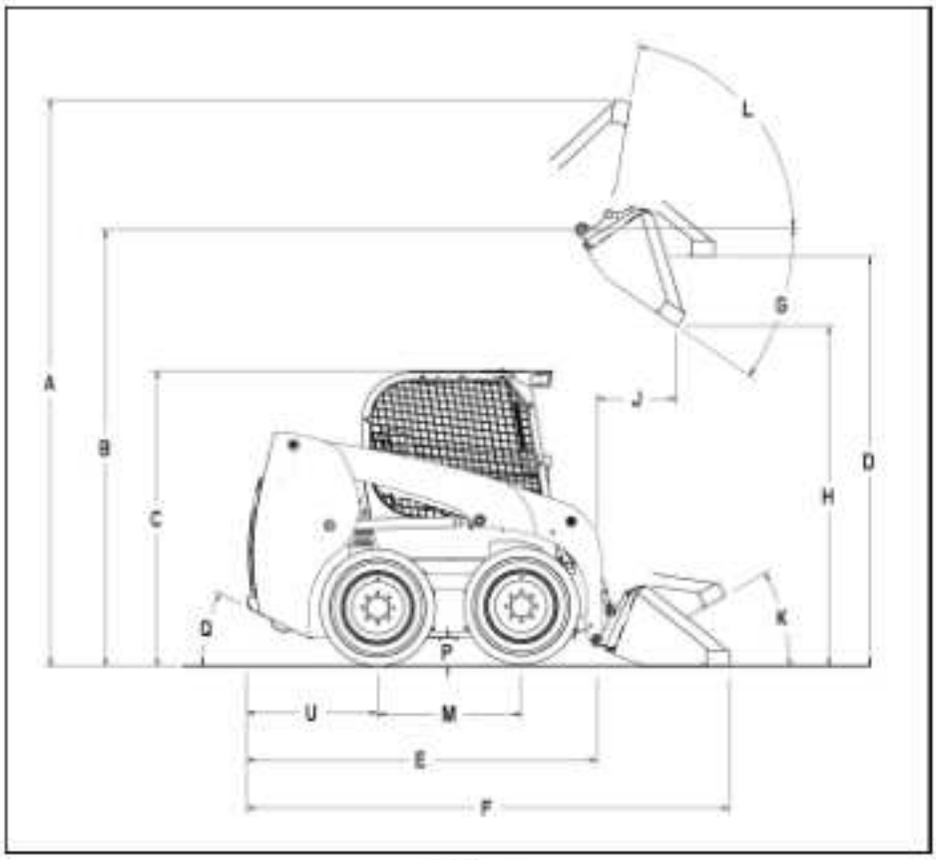
2. Slide the clamps in place on each end of the fuel filter and tighten.
3. Unlatch and close rear service door and close engine hood.

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

9 - SPECIFICATIONS

General specification

NOTE: *All specifications are given according to SAE standards or recommended practices where the specification applies.*



SMALL RADIAL FRAME WHEEL UNITS (SR130, SR160)

ITEM	COMPONENT	MEASUREMENT
A	Overall Operating Height (Fully Raised)	**3591 mm (141.4 in)**
B	Height to Hinge Pin (Fully Raised)	**2845 mm (112 in)**
C	Cab Height	**1919 mm (75.5 in)**
D	Highest Level Bucket Height	**2682 mm (105.6 in)**
E	Overall Length (No Attachment)	**2435 mm (95.9 in)**
F	Overall Length (With std Bucket)	**3175 mm (125 in)**
G	Dump Angle (Fully Raised)	**40.2 °**
H	Dump Height (Maximum Reach)	**2470 mm (97.2 in)**
J	Dump Reach (Fully Raised)	**469 mm (18.5 in)**
K	Maximum Rollback @ Ground	**26.1 °**
L	Maximum Rollback (Fully Raised)	**95.2 °**
M	Wheel Base	**941 mm (37 in)**
P	Ground Clearance (Belly Pan)	**178 mm (7 in)**
Q	Angle of Departure	**22 °**
U	Rear Axle to Bumper	**858 mm (33.8 in)**

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

Safety signs

Following is a listing of Safety Decals and locations. Read and understand them before operating the machine.

DANGER
CRUSH HAZARD Keep out of this area when lift arm is raised, unless lift arm is supported by the support strut. Failure to comply will result in death or serious injury.

Quantity: 1
84367564_A



84367564_A 1

Located under door way.



2

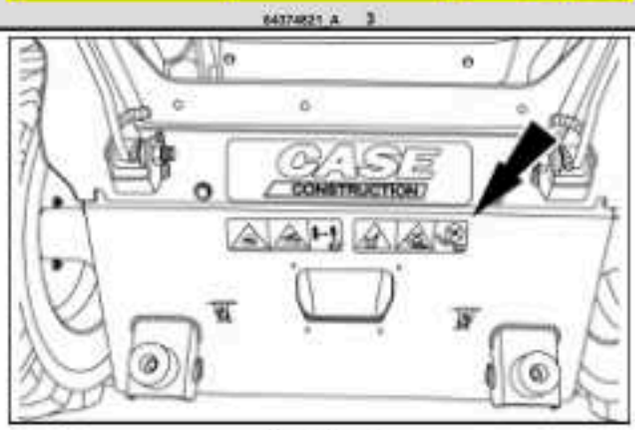
WARNING
FALL HAZARD NO Riders. Not a manlift or work platform. Failure to comply could result in death or serious injury.

Quantity: 1
84374821_A



84374821_A 3

Located under door way.

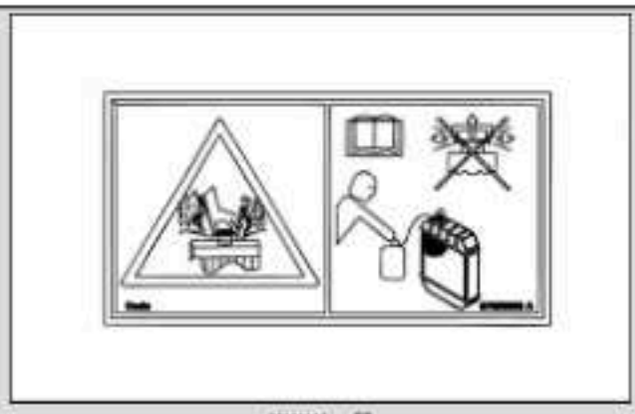


4

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >

WARNING:
DO NOT remove radiator cap. CHECK coolant level in recovery tank. Failure to comply could result in death or serious injury.

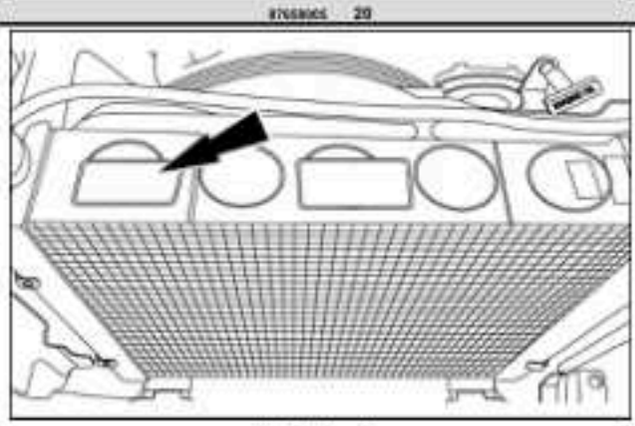
Quantity: 1
87658005



87658005 20

Models SR130, SR160, SR175, and SV185 only.
Located on top of the radiator or charge air cooler.

NOTE: *Not used on models SR220, SR250, SV250, SV300, TR320, and TV380.*



02139075AA 21

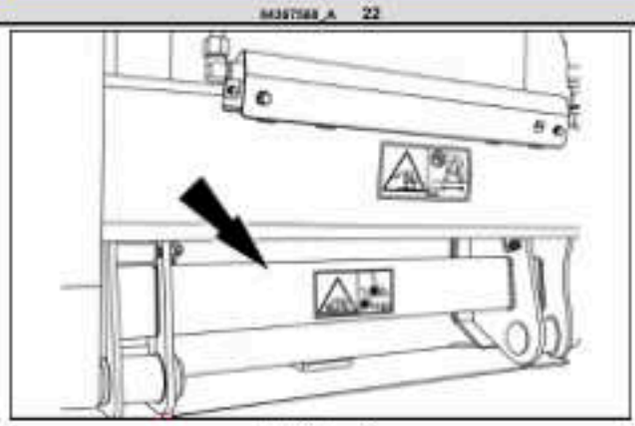
WARNING
CRUSH HAZARD
Check attachment for proper engagement before using. Failure to comply could result in death or serious injury.

Quantity: 1
84367568_A



84367568_A 22

Located on the back side of the coupler cross member.



84100218 23

MidWestTech | Case SR130, SR250, SR160, SV185, SR175, SV300, TR320, TV380 Ti... Order the manual at mid-west-tech.com >