WHEEL LOADER

SERVICE MANUAL

SL763S

HYUNDAI

MidWestTech | Hyundai SL763S Wheel Loader Service Manual | Publication SL763S

Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD 0-1

SECTION 1 GENERAL

Group 1 Safety Hints 1-1
Group 2 Specifications 1-10
Group 3 Operational Checkout Record Sheet 1-19

SECTION 2 POWER TRAIN SYSTEM

Group 1 Structure and Function 2-1
Group 2 Transmission 2-2
Group 3 Axle 2-23

SECTION 3 BRAKE SYSTEM

Group 1 Structure 3-1
Group 2 Components specification and function 3-2

SECTION 4 STEERING SYSTEM

Group 1 Hydraulic Circuit 4-1
Group 2 Structure and Function 4-5
Group 3 Operational Checks and Troubleshooting 4-16
Group 4 Test and Adjustments 4-22

SECTION 5 WORK EQUIPMENT

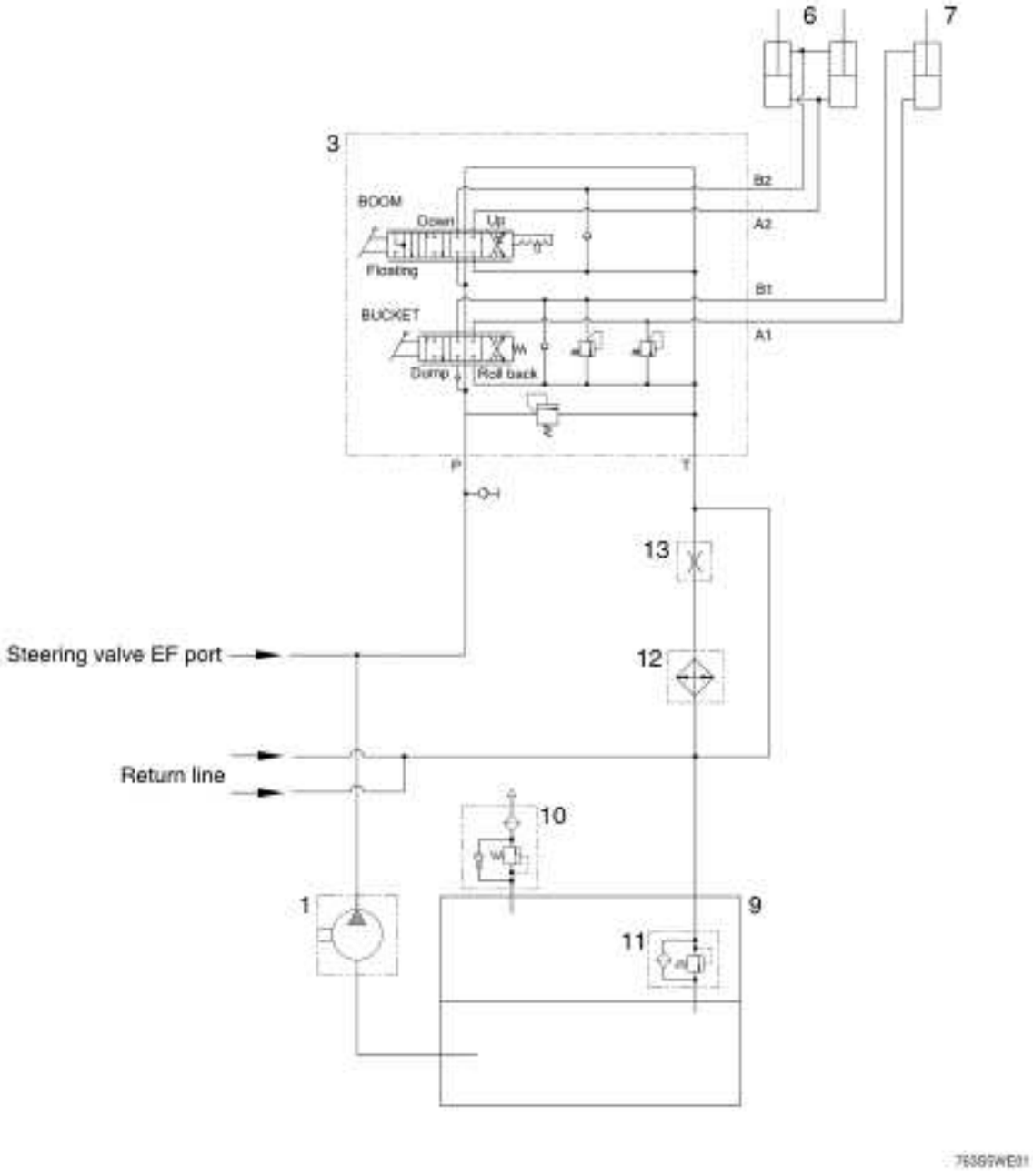
Group 1 Hydraulic Circuit 5-1
Group 2 Structure and Function 5-8
Group 3 Operational Checks and Troubleshooting 5-20
Group 4 Test and Adjustments 5-30

SECTION 6 ELECTRICAL SYSTEM

Group 1 Component Location 6-1
Group 2 Electrical Circuit 6-3
Group 3 Monitoring System 6-4
Group 4 Connector 6-11

MidWestTech | Hyundai SL763S Wheel Loader Service Manual | Publication SL763S Order the manual at mid-west-tech.com >

2. WORK EQUIPMENT HYDRAULIC CIRCUIT



1	Main pump	10	Air breather
3	Main control valve	11	Return filter
6	Boom cylinder	12	Oil cooler
7	Bucket cylinder	13	Orifice
9	Hydraulic tank		

MidWestTech | Hyundai SL763S Wheel Loader Service Manual | Publication SL763S Order the manual at mid-west-tech.com >

2. TROUBLESHOOTING

※ Diagnose malfunction charts are arranged from most probable and simplest to verify, to least likely, more difficult to verify. Remember the following steps when troubleshooting a problem :

Step 1. Operational check out procedure (see section 1)
Step 2. Operational checks (see group 3)
Step 3. Troubleshooting
Step 4. Tests and adjustments (see group 4)

Problem	Cause	Remedy
Noisy hydraulic pump	Low oil supply or wrong viscosity.	Fill reservoir with recommended oil.
	Plugged or pinched suction line.	Clean or replace line.
	Air in oil.	Check for foamy oil. Tighten connections. Replace O-rings and or lines.
	Plugged suction strainer.	Inspect and clean strainer in reservoir.
	Loose or missing hydraulic line clamps.	Tighten or replace clamps.
	Hydraulic lines in contract with frame.	Inspect and repair.
	Worn or damaged pump.	Do hydraulic pump performance check in group 3. Do hydraulic pump flow test in group 4.
No or Slow hydraulic functions	Failed or worn hydrualic pump.	Do performance check.
	Cold oil.	Warm oil up.
	Slow engine speed.	Adjust engine speed. Check high idle speed.
	Suction line air leak.	Check for foamy oil.
	Low oil supply.	Add recommended oil.
	Wrong oil viscosity.	Use recommended oil.
	Oil leaking past cylinders or control valve.	Check cylinder drift in group 3.
	Blocked or damaged line.	Inspect lines.
	Binding loader control valve (MCV) spool.	Inspect valve.

MidWestTech | Hyundai SL763S Wheel Loader Service Manual | Publication SL763S Order the manual at mid-west-tech.com >

5. LOADER SYSTEM AND PORT RELIEF VALVE PRESSURE TEST

- SPECIFICATION

Oil temperature (40~50°C)

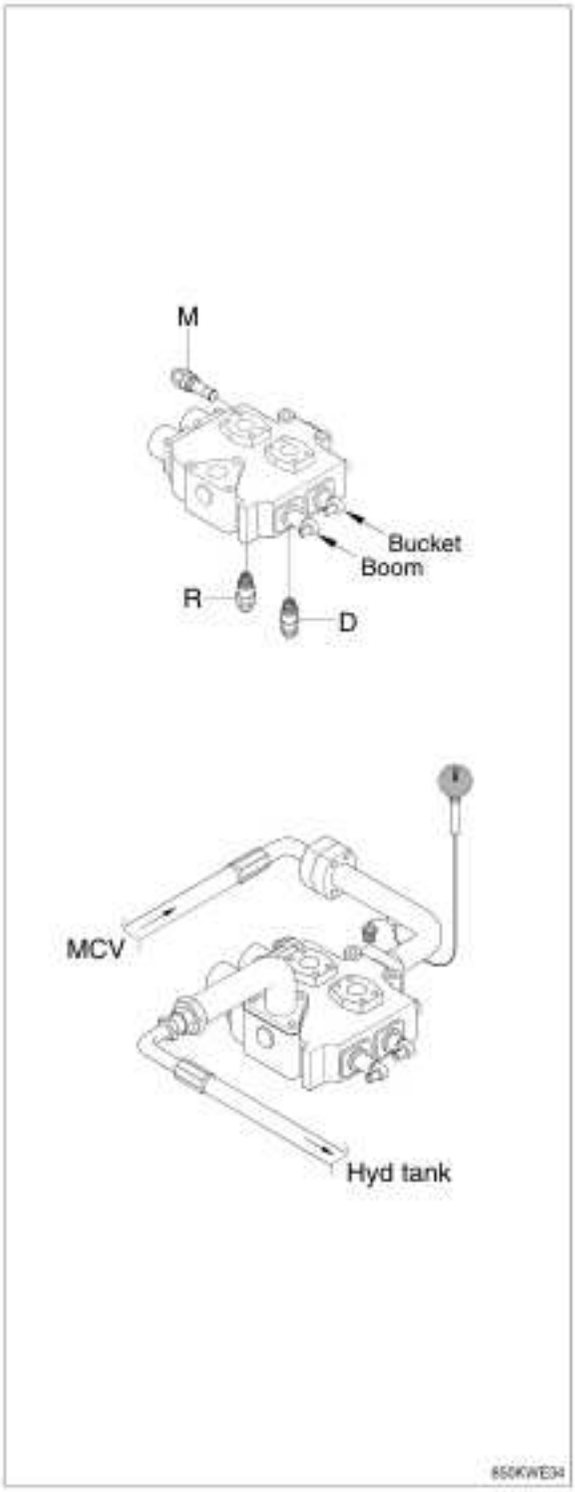
Relief valve	Engine speed	Relief pressure
System (M)	Low	180±5 kg/cm² (2610±70 psi)
Bucket rollback (R)	Low	200±5 kg/cm² (2840±70 psi)
Bucket dump (D)	Low	130±5 kg/cm² (1850±70 psi)

- Gauge and tool

Gauge 0~35 MPa (0~350 bar, 0~5000 psi)
M : System (main) relief valve
R : Bucket rollback relief
D : Bucket dump relief

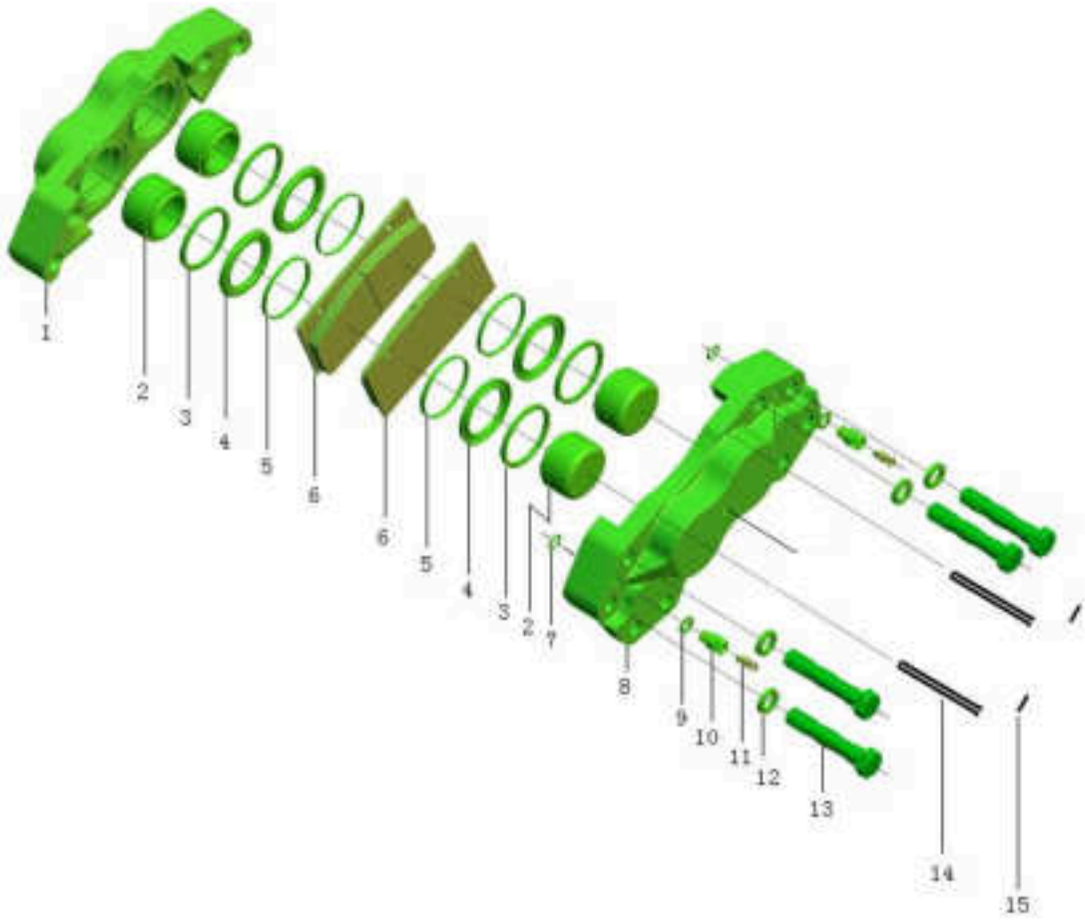
1) Install fitting and pressure gauge to test port in pump delivery line.
2) Install temperature reader. (see temperature reader installation procedure in this group)
3) Heat hydraulic oil to specifications. (see hydraulic oil warm up procedure in this group)
4) To check the system relief (M), run engine at low idle. Lower boom to bottomed position.
   Slowly activate boom down function while watching pressure gauge. If pressure is not to specification, loosen lock nut on system relief valve (M) and adjust to specification.

※ Do not adjust the system relief valve above 180 kg/cm² (2610 psi). Damage to the pump will result from excessive pressure settings.



MidWestTech | Hyundai SL763S Wheel Loader Service Manual | Publication SL763S Order the manual at mid-west-tech.com >

(4) Brake assembly



1	Exterior brake	6	Brake disk	11	Deflating valve
2	Piston	7	O-ring	12	Washer
3	Rectangular seal	8	Inner brake	13	Bolt
4	Dust case	9	Washer	14	Washer
5	Block ring	10	Connecting	15	Bolt pin

MidWestTech | Hyundai SL763S Wheel Loader Service Manual | Publication SL763S Order the manual at mid-west-tech.com >