



CONSTRUCTION
EQUIPMENT

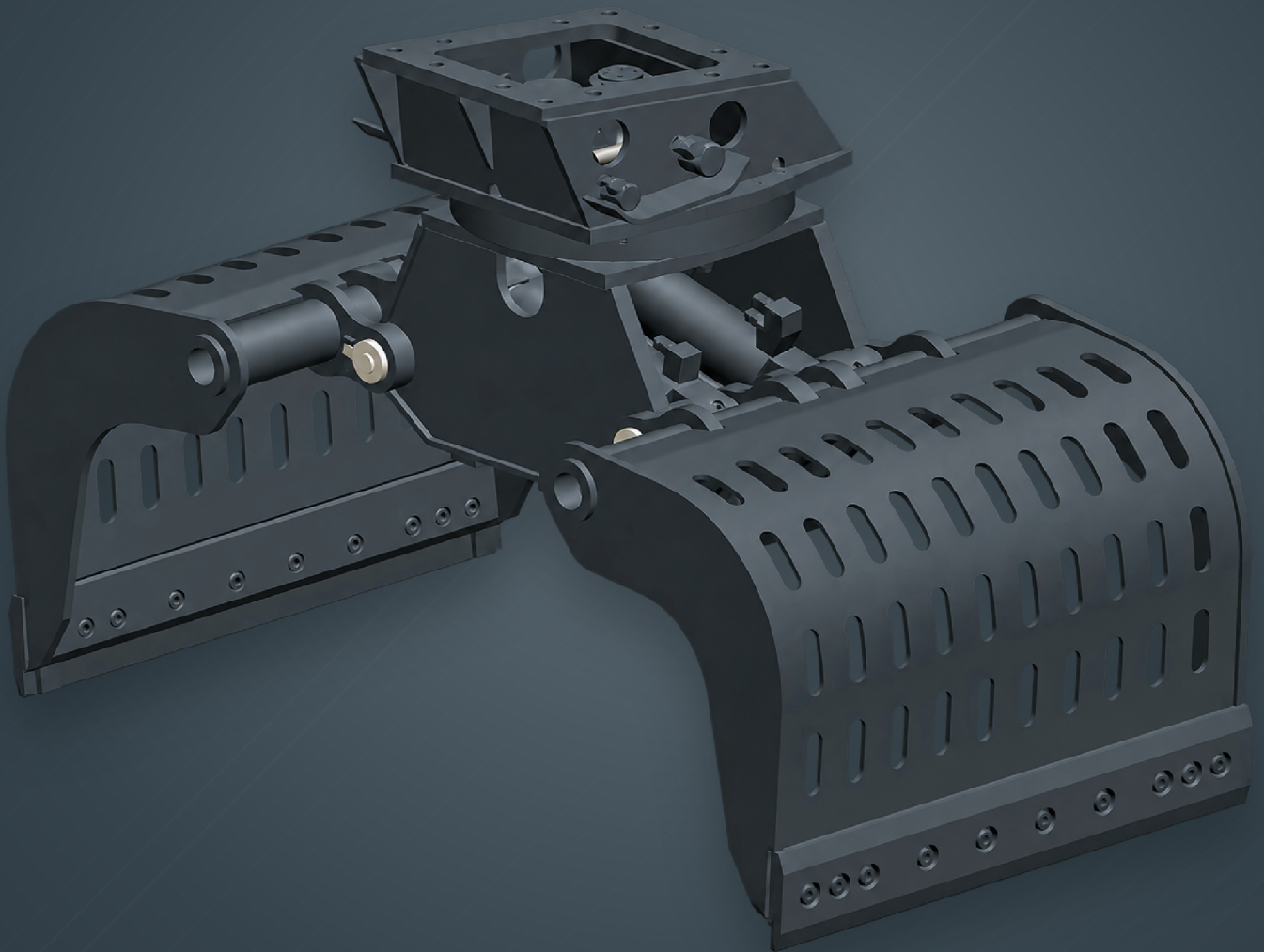
DOCUMENT NO. MHA-PM-MG1500
REVISION REV. 02 · 2026-02

DRAFT · NOT FOR EXTERNAL RELEASE

SPARE PARTS MANUAL

MG-1500

SORTING GRAPPLE



SERIAL NUMBER RANGE

----- TO -----

PARTS ENQUIRIES

info@mhaconstructionequipment.com
www.mhaconstructionequipment.com

READ BEFORE ORDERING

General information

MG-1500 SORTING GRAPPLE · SPARE PARTS IDENTIFICATION

MANUAL APPLICATION

Document number	MHA-PM-MG1500
Product	MG-1500 Sorting Grapple
Revision	REV. 02 · 2026-02
Serial number	-----

AUTHORIZED PARTS

Use genuine MHA spare parts selected for the applicable model, configuration and serial number. Damage or malfunction caused by unsuitable or unauthorized parts is outside the scope of MHA product support and warranty assessment.

MANUAL SCOPE

This manual supports spare-part identification and ordering only. It does not replace the applicable operating, maintenance, repair or safety instructions. Service work must be performed by trained personnel.

Information required with every order

Always identify the complete attachment before selecting a part. Submit the following information to avoid delays or incorrect supply.

01 Complete model designation

02 Full serial number

03 Item and part number

04 Required quantity

PARTS ENQUIRIES

info@mhaconstructionequipment.com
www.mhaconstructionequipment.com

Revision record

DOCUMENT CONTROL & APPROVAL

REV.	DATE	DESCRIPTION OF CHANGE	PREPARED / APPROVED
01	2021-07	Initial issue.	_____ / _____
02	2026-02	Exchangeable wear-blade mounting bolts added. Upper (long) and lower (short) linkage axes revised. Welded linkage construction revised.	_____ / _____
---	-----		_____ / _____

IMPORTANT

This parts manual does not replace the operation, maintenance or safety manual. Repairs must be completed by trained personnel using suitable tools and safe working procedures.

GENUINE MHA SPARE PARTS

Use genuine MHA spare parts to maintain reliable operation, serviceability and product performance. Parts are selected for the applicable product configuration and serial-number range.

DATA STATUS

This revision is a controlled draft. Part numbers, drawings, application-specific torque requirements and service-kit contents remain subject to engineering approval. Placeholder fields identify data that must be confirmed before external publication.

Contents

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01	General information	Ordering instructions, required data, nameplate	05
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03	Complete attachment	FIG. 01 exploded view and detail index	07
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05	Hydraulic cylinders	FIG. 02 • items 27 / 28, 2-port and 4-port	10
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HOW TO USE THIS MANUAL

Locate the item number in the exploded view, then confirm the part number and quantity in the parts list.

The parts list runs continuously from page 08 to 09 in one table, subdivided by assembly group — item numbers are not renumbered between pages. For components supplied only as a set, order the complete service-kit part number.

SECTION 01

Before ordering

ORDERING INSTRUCTIONS

1

Identify the attachment

Model, full serial number and machine configuration

2

Select the required item

Item number, part number, description and quantity

3

Provide delivery details

Customer, contact, address and required delivery date

4

Send your request

info@mhaconstructionequipment.com

ORDER CHECKLIST

Customer / dealer name and contact details

Purchase order number, if available

Delivery method and shipping address

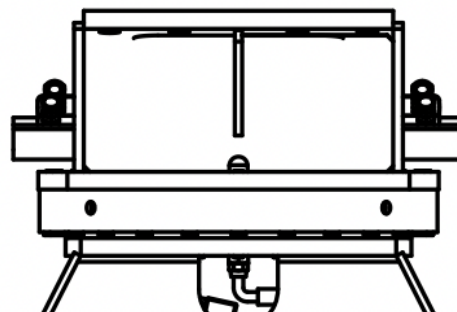
Model and complete serial number

Part number, description and required quantity

The serial number is the primary reference

Parts may differ between production batches of the same model. Always state the complete serial number.

SERIAL NUMBER LOCATION



NAMEPLATE LOCATION

Front face of the upper frame

RECORD YOUR ATTACHMENT DATA

MODEL _____

SERIAL NO. _____

YEAR _____

SECTION 02

How to use this manual

FIGURES, ITEM NUMBERS, SYMBOLS AND UNITS

FIGURE SYSTEM

FIG. 01 shows the complete attachment with item balloons 1–61. Locate the item number in the drawing, then refer to the master parts list on pages 08–09. FIG. 02 covers the hydraulic cylinders and FIG. 03 the Hydraulic Center Joint Assembly; item numbers remain consistent throughout the manual.

TABLE COLUMNS

ITEM · PART NO. · DESCRIPTION · SPEC. / REMARKS · CONTENTS (pieces inside a set) · QTY (order units per attachment). Set contents are never mixed into the QTY column.

SYMBOLS & UNITS

PC / PCS	Supplied individually. Quantity stated is per attachment.
SET	Supplied as a set only; not sold as single pieces. Contents are stated in the CONTENTS column or on page 13.
M12 × 60	Metric thread × length. All dimensions in this manual are millimetres.
LEFT / RIGHT	Seen from the operator's working direction towards the attachment.

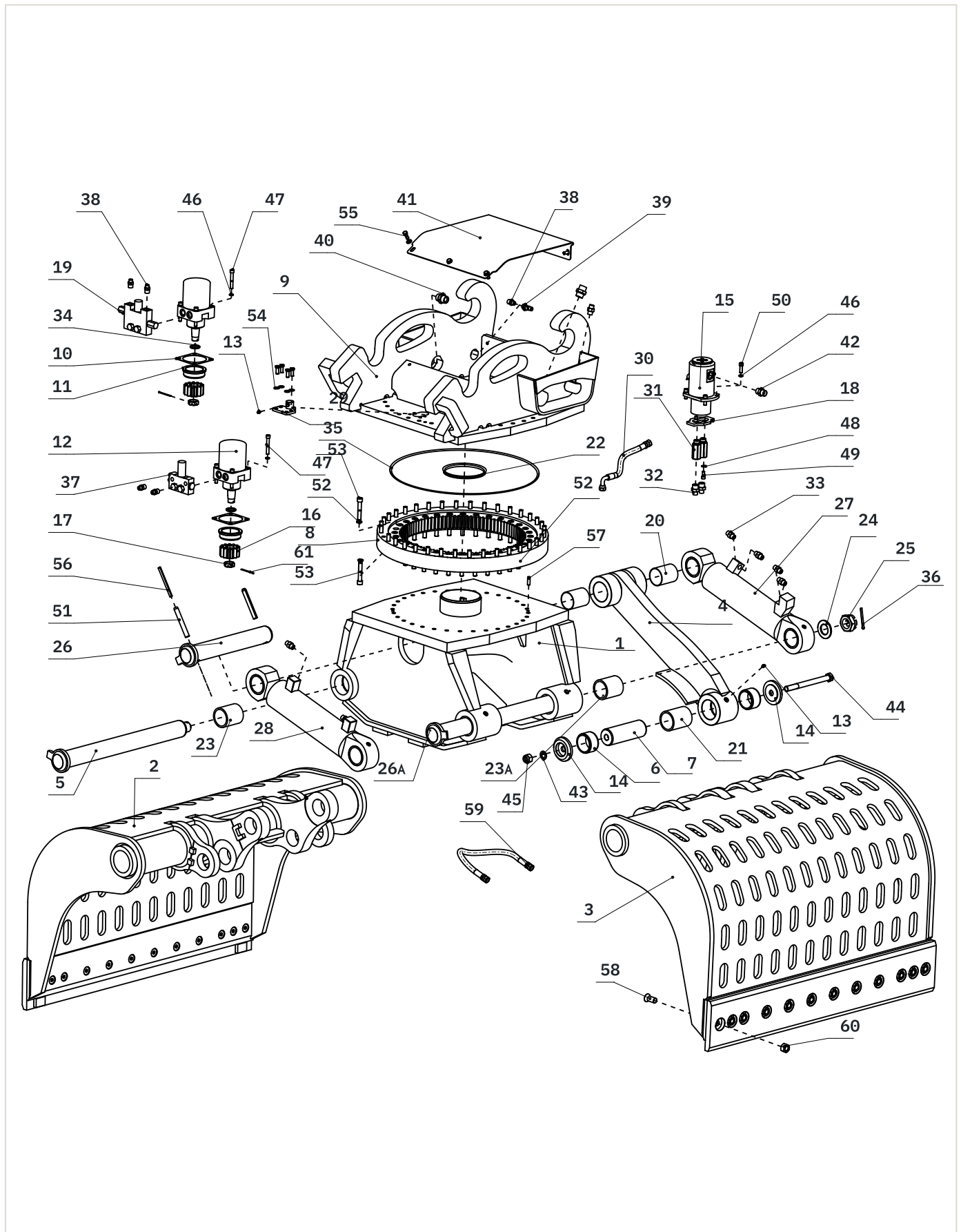
SAFETY

Before any dismantling, lower the attachment to the ground, release all hydraulic pressure and shut down the carrier. When replacing pins, wear blade or slewing-ring bolts, always use new fasteners of the specified grade and tighten to the torque values on page 14.

FIGURE 01

Complete attachment

EXPLODED VIEW
ITEMS 1-61 • PARTS LIST ON PAGES 08-09



SECTION 04 · FIG. 01

Parts list

COMPLETE ATTACHMENT
ITEMS 1-31 OF 62

ITEM	PART NO.	DESCRIPTION	SPEC. / REMARKS	CONT.	QTY
1	MG-1500-01-001	WELDED MAIN FRAME		—	1 PCS
2	MG-1500-01-002	SHELL, LEFT	SHORT LEVER	—	1 PCS
3	MG-1500-01-003	SHELL, RIGHT	LONG LEVER	—	1 PCS
4	MG-1500-04-001	WELDED LINKAGE CONSTRUCTION		—	1 PCS
5	MG-1500-04-002	MAIN HINGE PIN		—	2 PCS
6	MG-1500-04-003	BEARING BUSH	Ø60 × Ø70 × 45	—	2 PCS
7	MG-1500-04-004	LINKAGE AXIS, LOWER (SHORT)		—	1 PCS
8	MG-1500-02-001	SLEWING BEARING		—	1 PCS
9	MG-1500-01-004	WELDED ROTATOR FRAME		—	1 PCS
10	MG-1500-06-001	GASKET	SLEWING BEARING FACE	—	1 PCS
11	MG-1500-04-005	BEARING BUSH		—	2 PCS
12	MG-1500-02-002	HYDRAULIC MOTOR		—	2 PCS
13	MG-1500-07-001	GREASE NIPPLE SET	M10 × 1.0	13 PCS	1 SET
14	MG-1500-04-006	END CAP		—	2 PCS
15	MG-1500-02-003	HYDRAULIC CENTER JOINT ASSEMBLY	SEE FIG. 03 · P.11	—	1 PCS
16	MG-1500-02-004	GEAR, MOTOR PINION		—	2 PCS
17	MG-1500-02-005	NUT, PINION RETAINING	FOR ITEM 16	—	2 PCS
18	MG-1500-02-006	PLATE		—	1 PCS
19	MG-1050-02-007	RELIEF VALVE ASSEMBLY	SET AT 14 BAR	—	1 SET
20	MG-1500-04-007	BEARING BUSH	Ø60 × Ø70 × 70	—	2 PCS
21	MG-1500-04-008	BEARING BUSH	Ø60 × Ø70 × 70	—	1 PCS
22	MG-1500-06-002	WATERPROOF SEALING RING		—	1 PCS
23	MG-1500-04-009	BEARING BUSH	Ø60 × Ø70 × 50	—	4 PCS
23A	MG-1500-04-010	BEARING BUSH	Ø60 × Ø70 × 80	—	2 PCS
24	MG-1500-05-001	DISC SPRING	FOR ITEM 25	—	2 PCS
25	MG-1500-05-002	HEXAGON SLOTTED NUT	M48	—	2 PCS
26	MG-1500-04-016	LINKAGE AXIS, UPPER (LEFT)		—	1 PCS
26A	MG-1500-04-017	LINKAGE AXIS, UPPER (RIGHT)		—	1 PCS
27	MG-1500-03-001	HYDRAULIC CYLINDER, 4 PORTS	SEE FIG. 02 · P.10	—	1 PCS
28	MG-1500-03-002	HYDRAULIC CYLINDER, 2 PORTS	SEE FIG. 02 · P.10	—	1 PCS
29	MG-1500-07-002	GREASE FITTING, ANGLED		—	1 PCS
30	MG-1500-07-003	HOSE KIT, COMPLETE		—	1 SET
31	MG-1500-07-004	ADAPTER, STRAIGHT — MOTOR		—	2 PCS

SECTION 04 · FIG. 01

Parts list

 CONTINUED

COMPLETE ATTACHMENT
ITEMS 32-62 OF 62

ITEM	PART NO.	DESCRIPTION	SPEC. / REMARKS	CONT.	QTY
32	MG-1500-07-005	ADAPTER, ELBOW 90° – MOTOR		–	2 PCS
33	MG-1500-07-006	ADAPTER, STRAIGHT – CENTER JOINT		–	8 PCS
34	MG-1500-02-008	SEAL KIT, MOTOR	1 SET PER MOTOR	–	2 SETS
35	MG-1500-06-003	DUST SEAL		–	1 PCS
36	MG-1500-04-011	COTTER PIN	Ø8 × 80	–	2 PCS
37	MG-1050-02-007	RELIEF VALVE ASSEMBLY	SET AT 14 BAR	–	1 SET
38	MG-1500-07-007	ADAPTER, ELBOW 90° – CYLINDER		–	6 PCS
39	MG-1500-07-008	ADAPTER, TEE		–	2 PCS
40	MG-1500-07-009	ADAPTER, BULKHEAD		–	2 PCS
41	MG-1500-01-005	COVER PLATE		–	1 PCS
42	MG-1500-07-010	PLUG / TEST POINT		–	2 PCS
43	MG-1500-05-003	NORD-LOCK WASHER		–	1 PCS
44	MG-1500-05-004	HEX BOLT		–	1 PCS
45	MG-1500-05-005	SELF-LOCKING NUT	M24	–	1 PCS
46	MG-1500-05-006	NORD-LOCK WASHER SET	D12	12 PCS	1 SET
47	MG-1500-05-007	SOCKET CSK SCREW SET	M12 × 60 · 10.9	8 PCS	1 SET
48	MG-1500-05-008	DISC SPRING SET	D10	2 PCS	1 SET
49	MG-1500-05-009	SOCKET CSK SCREW SET	M10 × 25 · 10.9	2 PCS	1 SET
50	MG-1500-05-010	SOCKET CSK SCREW SET	M12 × 35 · 10.9	4 PCS	1 SET
51	MG-1500-04-012	HEX BOLT	M16 × 150	2 PCS	1 SET
52	MG-1500-05-011	NORD-LOCK WASHER SET – SLEWING BEARING	D16	48 PCS	1 SET
53	MG-1500-05-012	SOCKET CSK SCREW SET – SLEWING BEARING	M16 × 90 · 10.9	48 PCS	1 SET
54	MG-1500-05-013	DISC SPRING SET	D12	4 PCS	1 SET
55	MG-1500-05-014	HEX BOLT SET	M12 × 30 · 10.9	10 PCS	1 SET
56	MG-1500-04-013	SELF-LOCKING NUT	M16	2 PCS	1 SET
57	MG-1500-04-014	DOWEL PIN SET	D12 × 40	2 PCS	1 SET
58	MG-1500-05-015	SOCKET CSK SCREW SET – WEAR BLADE	M20 × 45 · 12.9	20 PCS	1 SET
59	MG-1500-07-011	HOSE KIT, COMPLETE		–	1 SET
60	MG-1500-05-016	NUT SET – WEAR BLADE	M24 · FOR ITEM 58	20 PCS	1 SET
61	MG-1500-04-015	COTTER PIN	Ø4 × 70	–	2 PCS
62	MG-1500-01-006	EXCHANGEABLE WEAR BLADE	WITH ITEMS 58 / 60	–	2 PCS

FIGURE 02

Hydraulic cylinders

ITEMS 27 / 28

SHARED INTERNAL COMPONENTS
REFERENCE ONLY

Item 28 · Left cylinder

2 PORTS

This diagram shows the exploded view of the left hydraulic cylinder assembly. The components are numbered as follows: 1. Cylinder housing (2 ports), 2. Piston rod, 3. Bushing (eye), 4. Rod guide, 5. Piston, 6. Seal kit (cylinder), 7. Grease nipple (M10 x 1.0), 8. Plug, and 9. Bearing bush (cylinder body). The seal kit (6) is shown as a dashed outline around the piston rod (2).

2 PORTS

ASSY · MG-1500-03-002

POS.	PART NO.	DESCRIPTION	QTY
1	MG-1500-03-301	CYLINDER HOUSING, 2 PORTS	1 PCS
2	MG-1500-03-202	PISTON ROD	1 PCS
3	MG-1500-03-203	BUSHING, EYE	2 PCS
4	MG-1500-03-204	ROD GUIDE	1 PCS
5	MG-1500-03-205	PISTON	1 PCS
6	MG-1500-03-206	SEAL KIT, CYLINDER	1 SET
7	MG-1500-03-207	GREASE NIPPLE · M10 × 1.0	2 PCS
8	MG-1500-03-208	PLUG	2 PCS
9	MG-1500-03-209	BEARING BUSH, CYLINDER BODY	1 PCS

Item 27 · Right cylinder

4 PORTS

This diagram shows the exploded view of the right hydraulic cylinder assembly. The components are numbered as follows: 1. Cylinder housing (4 ports), 2. Piston rod, 3. Bushing (eye), 4. Rod guide, 5. Piston, 6. Seal kit (cylinder), 7. Grease nipple (M10 x 1.0), 8. Plug, and 9. Bearing bush (cylinder body). The seal kit (6) is shown as a dashed outline around the piston rod (2).

4 PORTS

ASSY · MG-1500-03-001

POS.	PART NO.	DESCRIPTION	QTY
1	MG-1500-03-201	CYLINDER HOUSING, 4 PORTS	1 PCS
2	MG-1500-03-202	PISTON ROD	1 PCS
3	MG-1500-03-203	BUSHING, EYE	2 PCS
4	MG-1500-03-204	ROD GUIDE	1 PCS
5	MG-1500-03-205	PISTON	1 PCS
6	MG-1500-03-206	SEAL KIT, CYLINDER	1 SET
7	MG-1500-03-207	GREASE NIPPLE · M10 × 1.0	2 PCS
8	MG-1500-03-208	PLUG	2 PCS
9	MG-1500-03-209	BEARING BUSH, CYLINDER BODY	1 PCS

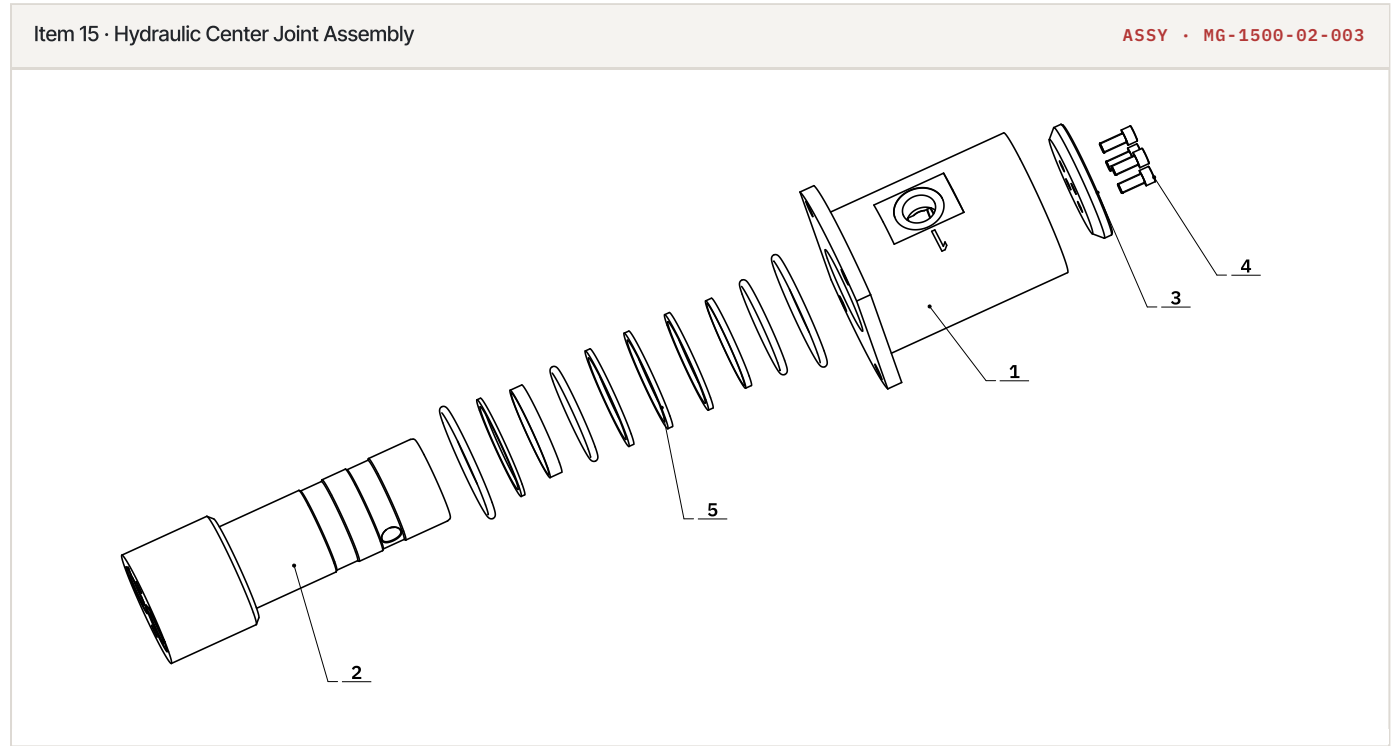
ENGINEERING NOTE

Port locations, bore and stroke, and the applicability of shared internal components remain subject to engineering verification. The reference data states "PISTON 2 PCS"; these tables show 1 piece per cylinder.

FIGURE 03

Hydraulic Center Joint Assembly

ITEM 15 • EXPLODED VIEW



POS.	PART NO.	DESCRIPTION	QTY
1	MG-1500-02-101	CENTER JOINT HOUSING	1 PCS
2	MG-1500-02-102	CENTER JOINT ROTOR	1 PCS
3	MG-1500-02-103	CENTER JOINT COVER, UPPER / LOWER	2 PCS
4	MG-1500-02-104	CENTER JOINT PORT PLATE	1 PCS
5	MG-1500-02-105	SEAL KIT, COMPLETE	1 SET

SERVICE NOTE

If the center joint leaks, fit the complete seal kit (5) first. Replace the complete assembly (item 15) if the rotor or housing is scored or scratched. Record which line belongs to which port before dismantling.

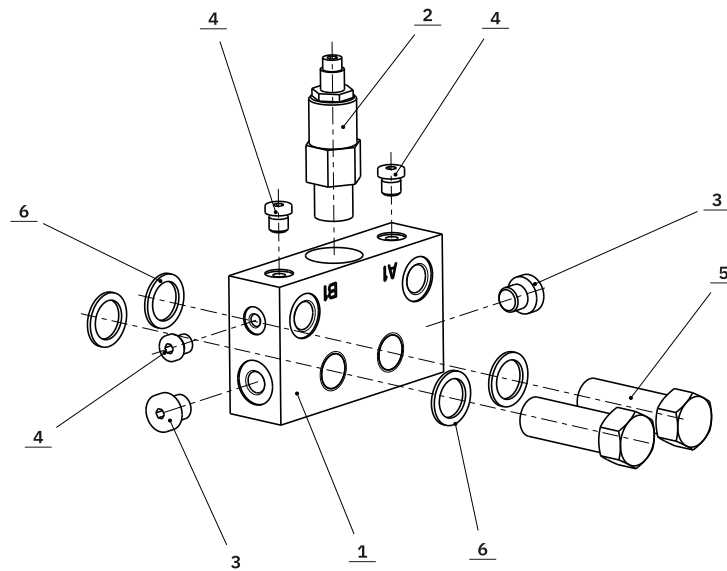
FIGURE 04

Relief Valve Assembly

SOURCE DRAWING ASG_RVA_001
ASSEMBLY MASS 2.98 kg

Items 19 / 37 • Relief Valve Assembly

ASSY • MG-1050-02-007



POS.	PART NO.	DESCRIPTION	SPEC. / REMARKS	QTY
1	MG-1050-02-301	VALVE BLOCK	—	1 PCS
2	MG-1050-02-302	RELIEF VALVE	LBRV2-10-30	1 PCS
3	MG-1050-02-303	G1/4 PLUG	4BN-04WD	2 PCS
4	MG-1050-02-304	G1/8 PLUG	4BN-02WD	3 PCS
5	MG-1050-02-305	G1/2-L57 HOLLOW BOLT	STANDARD	2 PCS
6	MG-1050-02-306	G1/2 BONDED SEAL	STANDARD	4 PCS

Verify valve setting and compatibility against the attachment serial number before ordering or installation.

SECTION 07

Service kits

KITS SUPPLIED AS COMPLETE SETS

CONTENTS FOR IDENTIFICATION ONLY
ORDER AS A COMPLETE KIT

Cylinder Seal Kit

CYLINDER SEAL KIT

1 set per cylinder · FIG. 02 POS. 6 · 2 / 4 ports

PART NO. MG-1500-03-206

Center Joint Seal Kit

CENTER JOINT SEAL KIT

1 set · FIG. 03 POS. 5 · complete seal kit

PART NO. MG-1500-02-105

Bushing Kit

BUSHING KIT

ITEM	COMPONENT PART NO.	QTY
6	MG-1500-04-003	2 PCS
11	MG-1500-04-005	2 PCS
20	MG-1500-04-007	2 PCS
21	MG-1500-04-008	1 PCS
23	MG-1500-04-009	4 PCS
23A	MG-1500-04-010	2 PCS

KIT PART NO. MG-1500-09-002

Pin Kit

PIN KIT

ITEM	COMPONENT PART NO.	QTY
5	MG-1500-04-002	1 PCS
6	MG-1500-04-003	1 PCS
14	MG-1500-04-006	2 PCS
24	MG-1500-05-001	2 PCS
25	MG-1500-05-002	2 PCS
26	MG-1500-04-016	1 PCS
26A	MG-1500-04-017	1 PCS
36	MG-1500-04-011	2 PCS
43	MG-1500-05-003	1 PCS
44	MG-1500-05-004	1 PCS
45	MG-1500-05-005	1 PCS
51	MG-1500-04-012	2 PCS
56	MG-1500-04-013	2 PCS

KIT PART NO. MG-1500-09-003

Wear Blade Kit

WEAR BLADE KIT

ITEM	COMPONENT PART NO.	QTY
62	MG-1500-01-006	2 PCS
58	MG-1500-05-015	20 PCS
60	MG-1500-05-016	20 PCS

KIT PART NO. MG-1500-09-001

Motor Seal Kit

MOTOR SEAL KIT

1 set per motor · main Parts List item 34

PART NO. MG-1500-02-008

Recommended spare parts

QUANTITIES TO BE SET BY MHA SERVICE

PART	ITEM NO.	12-MONTH STOCK	OVERHAUL STOCK
Exchangeable wear blade	62		
Cylinder seal kit	FIG. 02 · POS. 6		
Bushing set	6 / 11 / 20 / 21 / 23 / 23A		
Hose kit	30		
Split pins / disc springs (single-use)	24 / 36 / 61		

STANDARD TIGHTENING TORQUES

Metric bolt torque table

TORQUE UNIT: N·m • METRIC COARSE THREAD

THREAD SIZE	PITCH	GRADE 8.8	GRADE 10.9	GRADE 12.9
M5	0.8	6	9	10
M6	1.0	10	15	18
M8	1.25	25	36	43
M10	1.5	50	72	84
M12	1.75	88	126	147
M14	2.0	140	200	234
M16	2.0	218	310	363
M18	2.5	300	430	502
M20	2.5	425	610	710
M22	2.5	580	830	970
M24	3.0	730	1,040	1,220
M27	3.0	1,080	1,540	1,800
M30	3.5	1,470	2,100	2,450

IMPORTANT

These are general reference values and must be verified against the applicable MHA engineering standard before publication. Where a component drawing, process specification or dedicated service instruction gives a different torque, the dedicated value takes precedence. Do not use this draft for service work.

DRAFT TEMPLATE • NOT A SIGNED DECLARATION

EU Declaration of Conformity

in accordance with Annex II, Type A of Directive 2006/42/EC on machinery

1. Manufacturer

Changzhou MHA Construction Equipment Co., Ltd.
Pingqian Industrial Park, Changzhou, Jiangsu 213000, People's Republic of China
Tel: +86-519-89185711 · Email: info@mhaconstructionequipment.com

2. Product identification

Product designation	Sorting Grapple
Model / Type	MG-1500
Serial number	_____

Intended use: Hydraulic attachment for professional use with excavators in sorting and material-handling operations.

3. Applicable directive and harmonised standards

Machinery Directive 2006/42/EC
EN ISO 12100:2010 — Safety of machinery; risk assessment and risk reduction
EN ISO 4413:2010 — Hydraulic fluid power; general rules and safety requirements

4. Declaration

We declare under our sole responsibility that the product identified above is in conformity with the relevant provisions of Directive 2006/42/EC and the standards listed in Section 3. This declaration becomes valid only when completed, technically verified, dated and signed by the authorised signatory.

5. Authorised signatory

Name: Mark Kang	Function: Sales General Manager
Place: Changzhou, P.R. China	Date: _____

SIGNATURE AND COMPANY STAMP

Parts. Support. Productivity.

www.mhaconstructionequipment.com

info@mhaconstructionequipment.com

Always state the model and complete serial number