

Parts Manual

FOR SERIES

C-28

Hydraulic Backhoes

SERIAL NO. _____

NOTE:

The parts pages are intended for use in ordering parts, and therefore do not always depict the correct way to assemble components.

The logo for Hein-Werner, featuring the brand name in a stylized, italicized font with a horizontal line through the middle of the letters.

CONSTRUCTION EQUIPMENT DIVISION
WAUKESHA, WISCONSIN 53186

Akerman HW Inc. ["Akerman"]**WARRANTY AND LIMITATION OF LIABILITY****Limited Warranty**

Akerman warrants to the first user that its products shall be free from defects in material and workmanship for six (6) months from date of delivery or 1000 hours of use, whichever first occurs.

Should failure to conform with this warranty appear during the warranty period as mentioned above under normal and proper use and provided the products have been properly installed, stored and maintained, Akerman shall, if given prompt notice by Buyer, correct such nonconformity, at Akerman's option, by: (i) repair at jobsite, if possible; or, (ii) repair or replacement of the nonconforming products or parts thereof F.O.B. factory or authorized distributor; or, (iii) refund of the purchase price of the nonconforming product after return of such product to Akerman. Return of products or parts to Akerman shall be at Buyer's risk and expense. In no event shall Akerman be responsible for providing working access to the defect, including disassembly and reassembly of associated equipment.

Parts repaired or replaced, or the product if replaced as a unit, are warranted for 30 days or for the period of time remaining under the original warranty, whichever is longer.

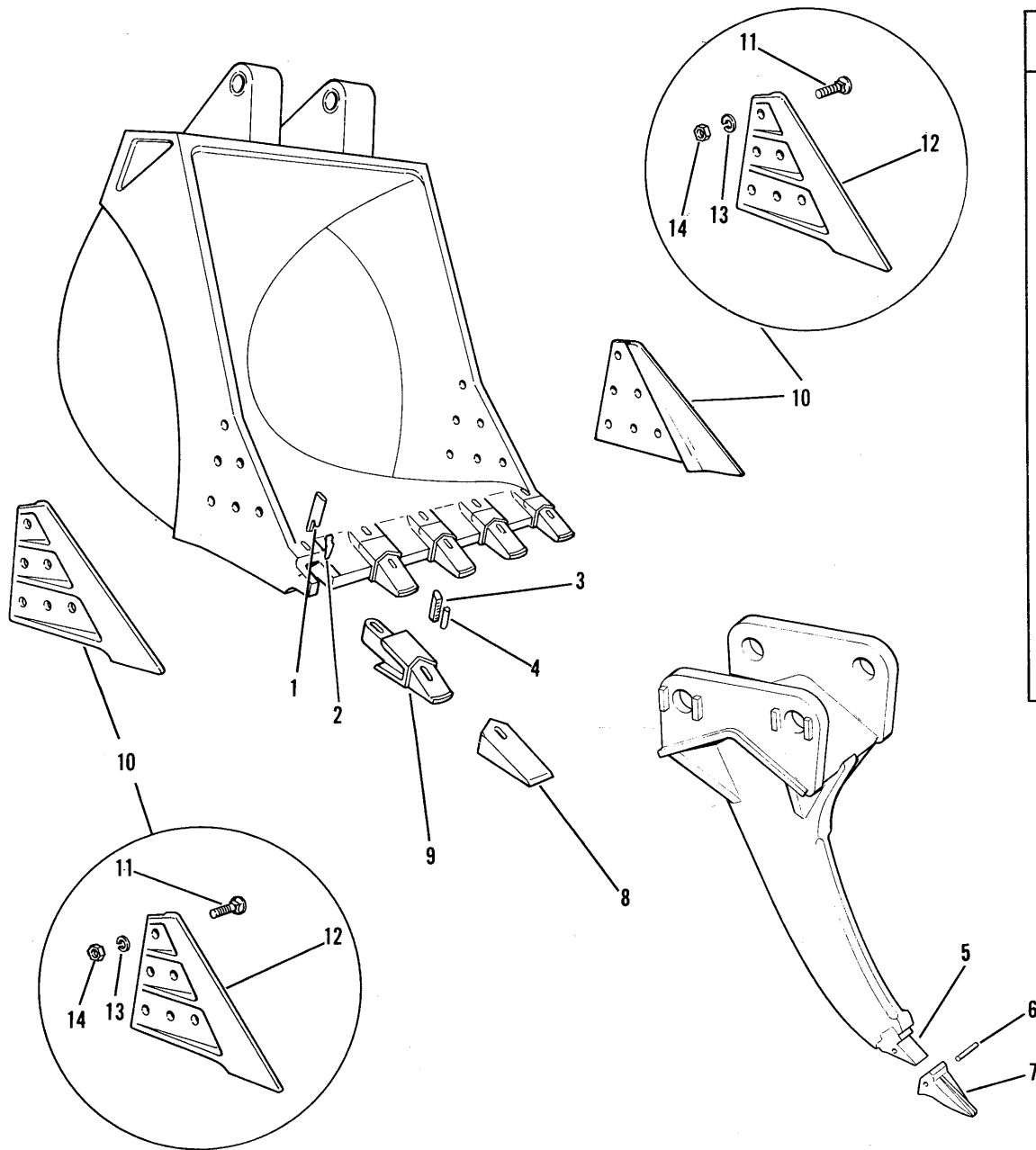
THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF QUALITY, WRITTEN, ORAL OR IMPLIED; AND ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. Correction of nonconformities in the manner and for the period of time provided above shall be Buyer's exclusive remedy and shall constitute fulfillment of all liabilities of Akerman (including any liability for direct, indirect, special, incidental and consequential damages) whether in warranty, contract, negligence, tort, strict liability or otherwise with respect to nonconformance or defects in the products delivered hereunder.

Akerman neither assumes nor authorizes any person to assume for it any obligation other than as herein provided in connection with its products.

The foregoing warranties shall not apply to any used product or parts or any products or parts which a) have been improperly repaired or altered, b) have been subjected to misuse, negligence or accident, or c) have been used in a manner contrary to Akerman's instructions.

LIMITATION OF LIABILITY

IN NO EVENT SHALL AKERMAN BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES whether arising in contract, negligence, tort, strict liability or otherwise, including but not limited to damage to property, loss of profits or revenues, loss of use of the product or any associated equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs, or claims of customers of the Buyer for such or other damages, whether on account of products, parts or services furnished hereunder or delays in delivery or performance thereof.



ITEM	PART NUMBER	DESCRIPTION	QTY
1	150373	Key	As Req'd
2	150374	Key Tang	As Req'd
3	150378	Point Pin	As Req'd
4	150379	Pin Lock	As Req'd
5	150639	Shank	1
6	150638	Pin	1
7	150637	Tooth-Impact Resist. (Blue)	1
	150715	Tooth-Abrasion Resist. (Red)	1
8	150377	Point	As Req'd
9	150376	Adapter	As Req'd
10	150634	Side Cutter Package (4" cutter width)*	1
	150635	Side Cutter Package (2" cutter width)**	1
11	150527	Plow Bolt (For 4" cutters)	12
	150526	Plow Bolt (For 2" cutters)	12
12	150518	Side Cutter L.H. (4" cutter)	1
	150519	Side Cutter R.H. (4" cutter)	1
	150516	Side Cutter L.H. (2" cutter)	1
	150517	Side Cutter R.H. (2" cutter)	1
13	400204	Lockwasher	12
14	400942	Nut	12

* Adds 8" to overall bucket width
 ** Adds 4" to overall bucket width

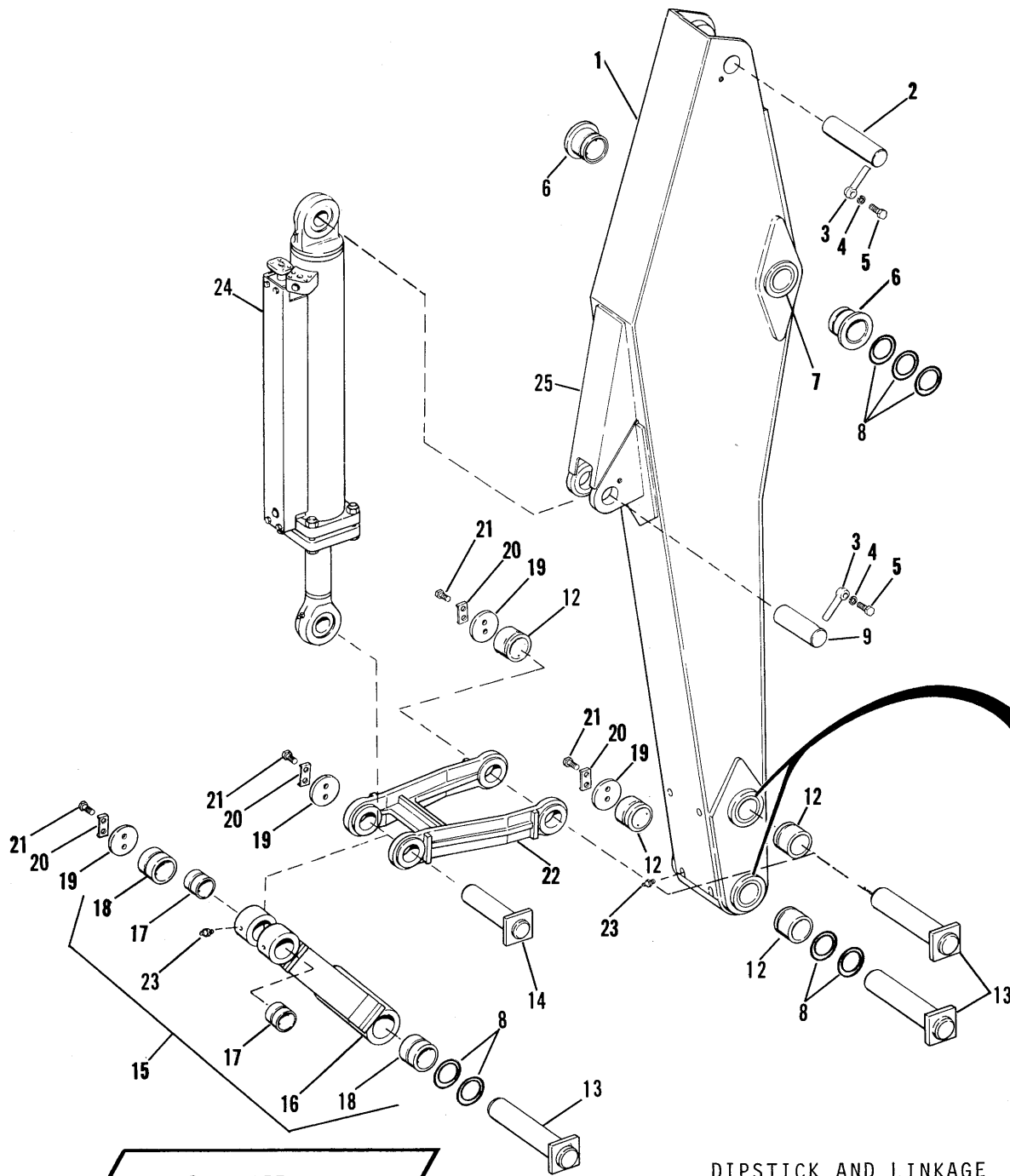
NOTE: Due to the wide variety of bucket points available, always specify bucket width and the bucket serial number when ordering parts.

Hein-Werner

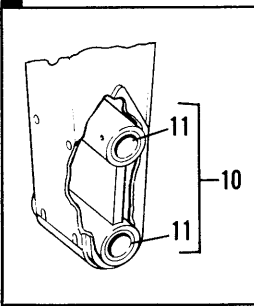
BUCKET PARTS
ATTACHMENT

EFFECTIVE

SN
Date



ITEM	PART NUMBER	DESCRIPTION	QTY
1	110372	Long Dipstick	1
	110517	Short Dipstick	1
2	210298	Pin	1
3	401206	Retainer	2
4	400204	Lockwasher	2
5	401207	Bolt (7/8-9 X 2 Gr 5)	2
6	220081	Bushing	2
7	110381	Housing	1
8	500440	Shim (1/16" wide)	As Req'd
9	210297	Pin	1
10	110375	Housing Assy (wo/Bushings)	1
11	110376	Housing (wo/Bushings)	2
12	220160	Bushing	4
13	210192	Pin	3
14	210200	Pin	1
15	150722	Bucket Link (w/Bushings)	1
16	150606	Bucket Link Only	1
17	220166	Bushing	2
18	220083	Bushing	2
19	210201	Retainer Plate	4
20	400678	Lock Plate	4
21	400430	Bolt (5/8-11 X 1½ Gr 5)	8
22	150698	Bell Crank	1
23	400015	Grease Fitting	8
24	041057	Bucket Cylinder Assembly	1
25	100818	Mounting Bracket	1



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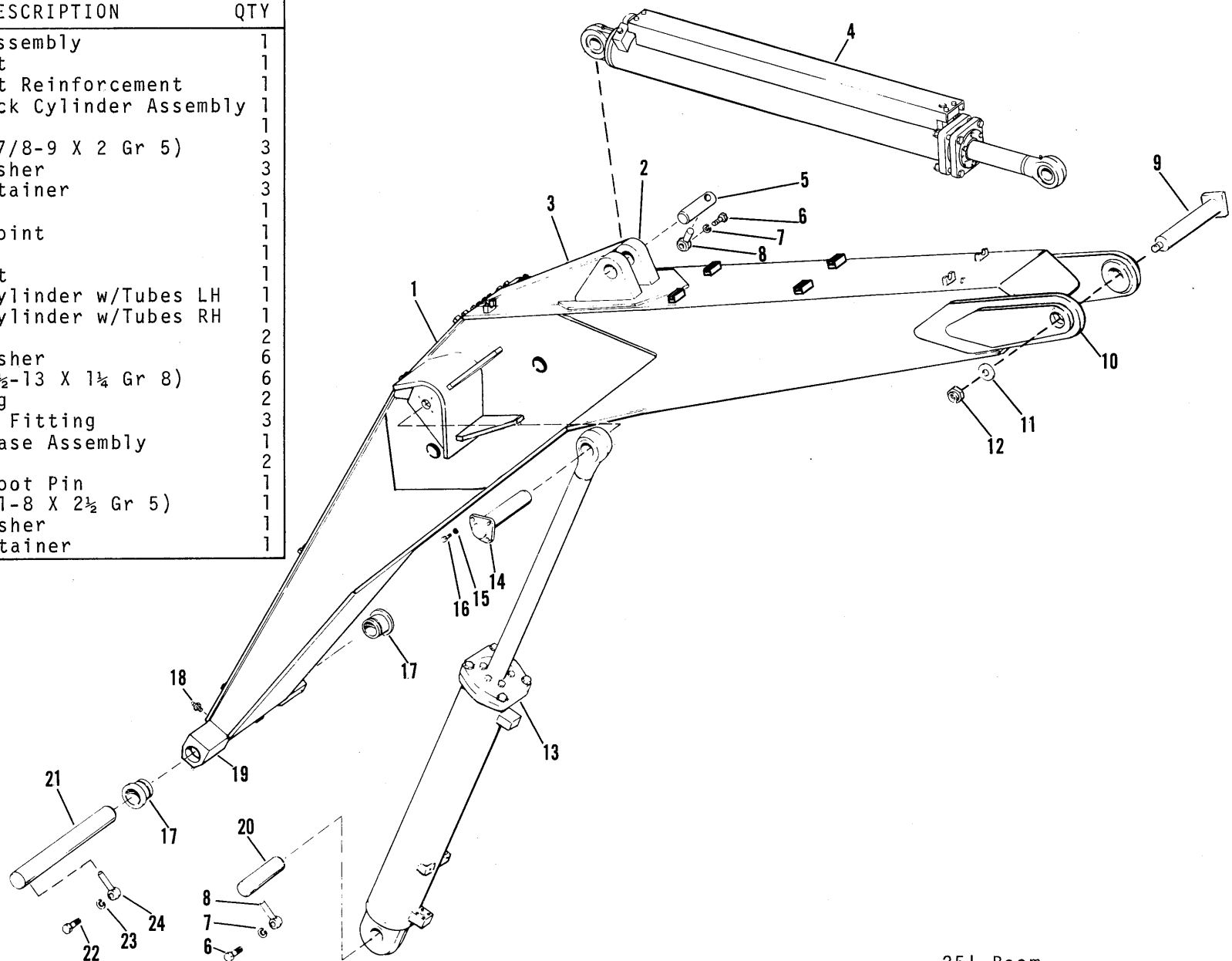
DIPSTICK AND LINKAGE

EFFECTIVE

SN 28-2900

Date July 10, 1978

ITEM	PART NUMBER	DESCRIPTION	QTY
1	100977	Boom Assembly	1
2	100818	Bracket	1
3	100798	Bracket Reinforcement	1
4	041056	Dipstick Cylinder Assembly	1
5	210297	Pin	1
6	401207	Bolt (7/8-9 X 2 Gr 5)	3
7	400204	Lockwasher	3
8	401206	Pin Retainer	3
9	210195	Pin	1
10	100346	Boom Point	1
11	210112	Washer	1
12	401386	Locknut	1
13	041052	Boom Cylinder w/Tubes LH	1
	041053	Boom Cylinder w/Tubes RH	1
14	210179	Pin	2
15	400056	Lockwasher	6
16	401307	Bolt (½-13 X 1¼ Gr 8)	6
17	220081	Bushing	2
18	400015	Grease Fitting	3
19	100787	Boom Base Assembly	1
20	210296	Pin	2
21	210319	Boom Foot Pin	1
22	400486	Bolt (1-8 X 2½ Gr 5)	1
23	400302	Lockwasher	1
24	401366	Pin Retainer	1



25' Boom

BOOM ASSEMBLY

ATTACHMENT

EFFECTIVE

SN 28-2900

Date July 10, 1978

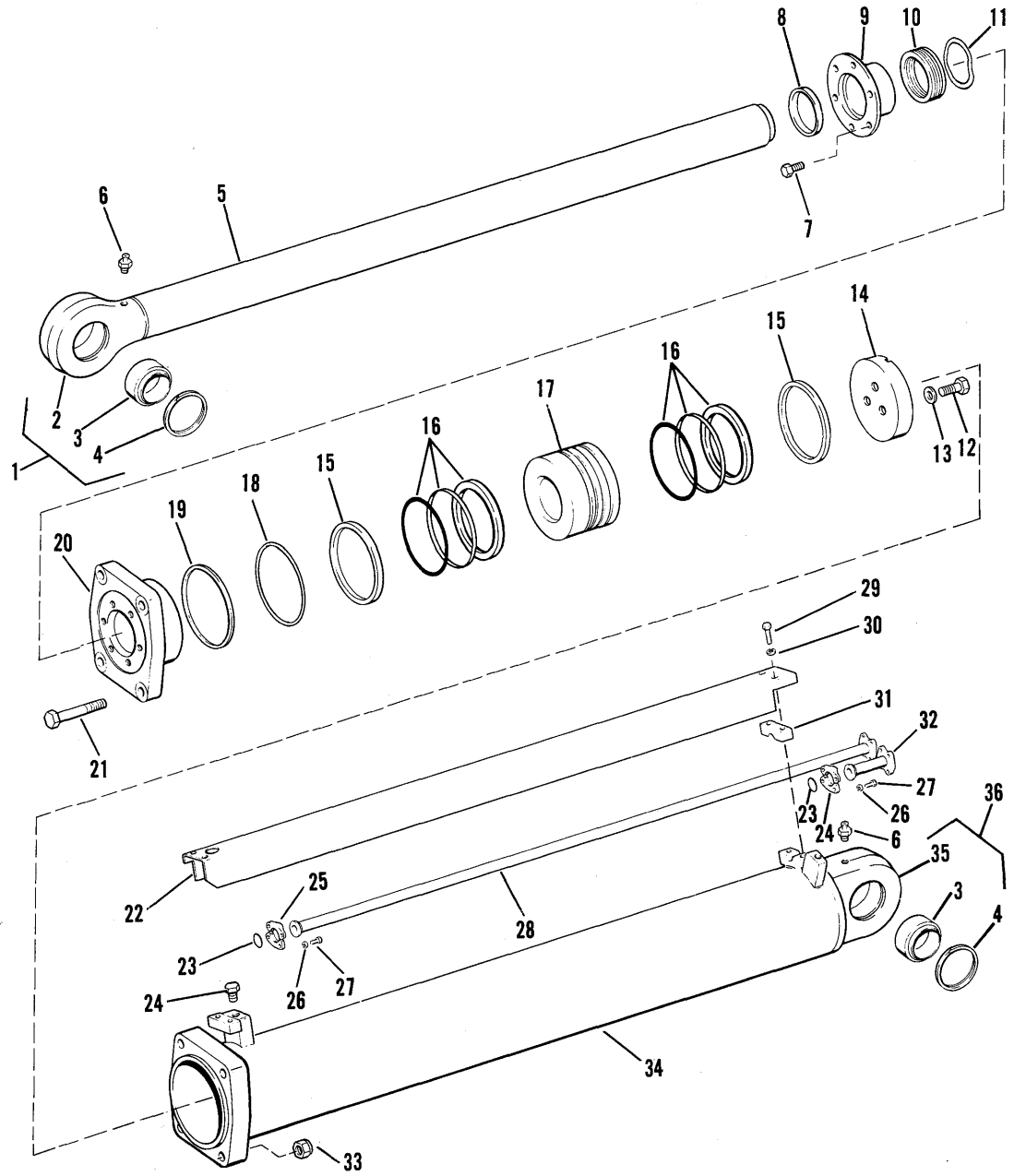
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Hein-Werner

ITEM	PART NUMBER	DESCRIPTION	QTY
1	041096	Rod End w/Bushing	1
2	040811	Rod End Only	1
3	220082	Bushing	2
4	401175	Snap Ring	4
5	040815	Rod Assembly	1
6	400015	Grease Fitting	2
7	400318	Bolt (½-13 X 1¼ Gr 5- drilled)	6
8	010140	Rod Wiper	1
9	040818	Rod Bearing	1
10	010168	Packing	1
11	040813	Wave Washer	1
12	401342	Bolt (1-14 NF X 3½ Gr 8)	3
13	400844	Washer	3
14	041010	Butt Plate	1
15	010210	Piston Ring	2
16	010221	Piston Ring Set (3 parts)	2
17	040816	Piston	1
18	010164	O-Ring	1
19	010165	Back-up Ring	1
20	040817	Head	1
21	400998	Bolt (1-14 X 5 Gr 8)	4
22	041045	Guard	1
23	010051	O-Ring	2
24	020492	Plug	2
25	400450	Flange	4
26	400380	Lockwasher	8
27	400379	Bolt (7/16-14 X 1¼ Gr 5)	8
28	032315	Tube	1
29	400036	Bolt (3/8-16 X 2 Gr 5)	4
30	400023	Lockwasher	4
31	401373	Clamp	1
32	032314	Tube	1
33	400658	Locknut	4
34	041065	Cylinder Body	1
35	040825	Base Only	1
36	041097	Base W/Bushing	1

Note: Order Part No. 041061 for Cylinder Assembly without tubes and guard.

CYLINDER SERVICE KIT
Includes Items 8,10,11,15,16,18,19,23
Order Part # 452863



BUCKET CYLINDER (041057)

CYLINDERS

EFFECTIVE
SN 28-2900
Date July 10, 1978

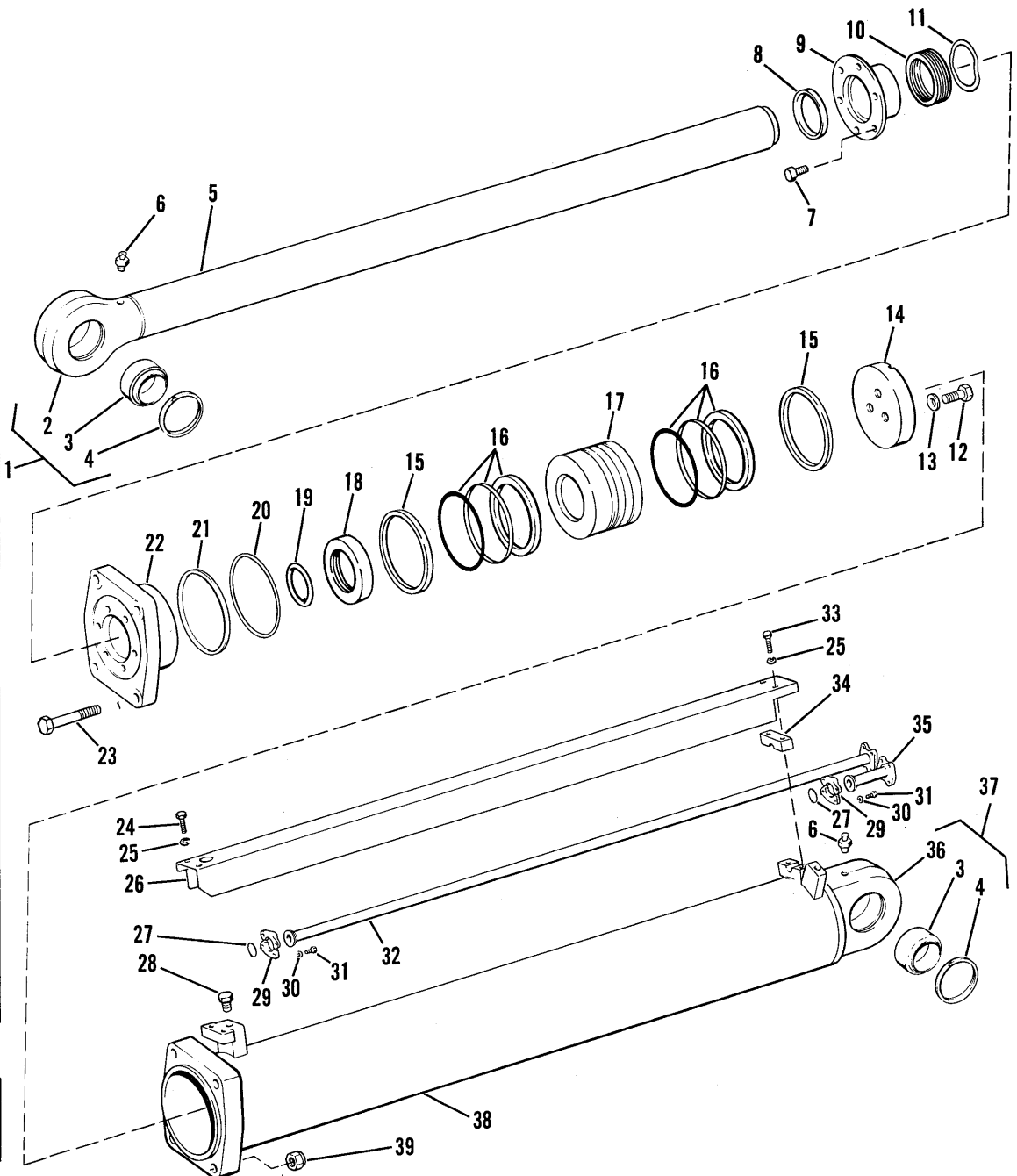


ITEM	PART NUMBER	DESCRIPTION	QTY
1	041096	Rod End w/Bushing	1
2	040811	Rod End Only	1
3	220082	Bushing	2
4	401175	Snap Ring	4
5	040815	Rod Assembly wo/Bushing	1
6	400015	Grease Fitting	2
7	400318	Bolt (1/2-13 X 1 1/4 Gr 5 -drilled)	6
8	010140	Rod Wiper	1
9	040818	Rod Bearing	1
10	010168	Packing	1
11	040813	Wave Washer	1
12	401342	Bolt (1-14 NF X 3 1/2 Gr 8)	3
13	400844	Washer	3
14	041010	Butt Plate	1
15	010210	Piston Ring	2
16	010221	Piston Ring Set (3 parts)	2
17	040816	Piston	1
18	041119	Spacer	1
19	010012	O-Ring	1
20	010231	O-Ring (for .410 Head groove)	1
21	010236	Back-up Ring (for .410)	1
22	040817	Head	1
23	401253	Bolt (1-14 X 5 1/2 Gr 8)	4
24	400022	Bolt (3/8-16 X 1 1/4 Gr 5)	2
25	400023	Lockwasher	4
26	041045	Guard	1
27	010051	O-Ring	2
28	020492	Plug	2
29	400450	Flange	4
30	400380	Lockwasher	8
31	400379	Bolt (7/16-14 X 1 1/4 Gr 5)	8
32	032315	Tube	1
33	400036	Bolt (3/8-16 X 2 Gr 5)	2
34	401373	Clamp	1
35	032314	Tube	1
36	040825	Base Only	1
37	041097	Base w/Bushing	1
38	041065	Cylinder Body	1
39	400658	Locknut	4

Note: Order Part No. 041061 for Cylinder Assembly without tubes and guard.

CYLINDER SERVICE KIT

Includes Items 8,10,11,15,16,19,20,21,27
Order Part # 452866



BUCKET CYLINDER (041057)

EFFECTIVE

SN 28-2927

Date Nov. 15, 1978

Hein-Werner

CYLINDERS

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ITEM	PART NUMBER	DESCRIPTION	QTY
1	041096	Rod End w/Bushing	1
2	040811	Rod End Only	1
3	220082	Bushing	2
4	401175	Snap Ring	4
5	040928	Rod Assembly	1
6	400015	Grease Fitting	2
7	400318	Bolt (1/2-13 X 1 1/4 Gr 5-drilled)	6
8	010124	Rod Wiper	1
9	040804	Rod Bearing	1
10	010163	Packing	1
11	040805	Wave Washer	1
12	401342	Bolt (1-14 NF X 3 1/2 Gr 8)	3
13	400844	Washer	3
14	041010	Butt Plate	1
15	010209	Piston Ring	2
16	010219	Piston Ring Set (3 parts)	2
17	041009	Piston	1
18	010142	O-Ring	1
19	010146	Back-up Ring	1
20	040803	Head	1
21	401253	Bolt (1-14 X 5 1/2 Gr 8)	4
22	041044	Guard	1
23	010051	O-Ring	2
24	020492	Plug	2
25	400450	Flange	4
26	400380	Lockwasher	8
27	400379	Bolt (7/16-14 X 1 1/4 Gr 5)	8
28	032313	Tube	1
29	400036	Bolt (3/8-16 X 2 Gr 5)	4
30	400023	Lockwasher	4
31	401373	Clamp	1
32	032314	Tube	1
33	400658	Locknut	4
34	041064	Cylinder Body	1
35	040810	Base Only	1
36	041095	Base w/Bushing	1

Note: Order Part No. 041060 for Cylinder Assembly without tubes and guard.

CYLINDER SERVICE KIT
Includes Items 8,10,11,15,16,18,19,23
Order Part # 452864

