

# PARTS & SERVICE NEWS

REF NO.	AA99056
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**SUBJECT:** UPGRADE STEERING CYLINDERS

**PURPOSE:** To provide service parts for Steering Cylinders used on the below listed units.

**APPLICATION:** GD530A/AW Graders Serial Number 202002 & Up  
 GD650A/AW Graders Serial Number 202002 & Up  
 GD670A/AW Graders Serial Number 202002 & Up  
 830 Graders Serial Number 200000 & Up  
 850 Graders Serial Number 200000 & Up  
 870 Graders Serial Number 200000 & Up  
 150A/FA Cranes Serial Number 10755 & Up

**FAILURE CODE:** H1X601

**DESCRIPTION:**

**Introduction:**

**Graders:**

The ball bushing at the base end of the steering cylinder would occasionally creep out of place. The cylinder weldment, 140274, can be replaced with cylinder weldment 1439369H1 and retaining ring 1439371H1. The retaining ring keeps the ball bushing in place. The spacers, 140308, should be upgraded to 1438135H1 if the cylinder weldment is upgraded. Although the rod weldment, 16331, was not changed, parts from the Parts Depot are now high strength alloy steel to resist abuse and bending.

**Cranes:**

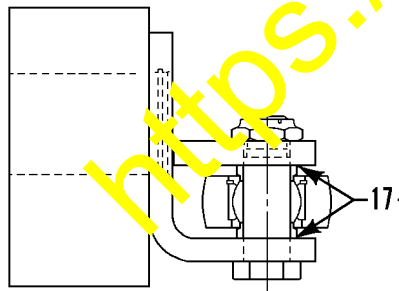
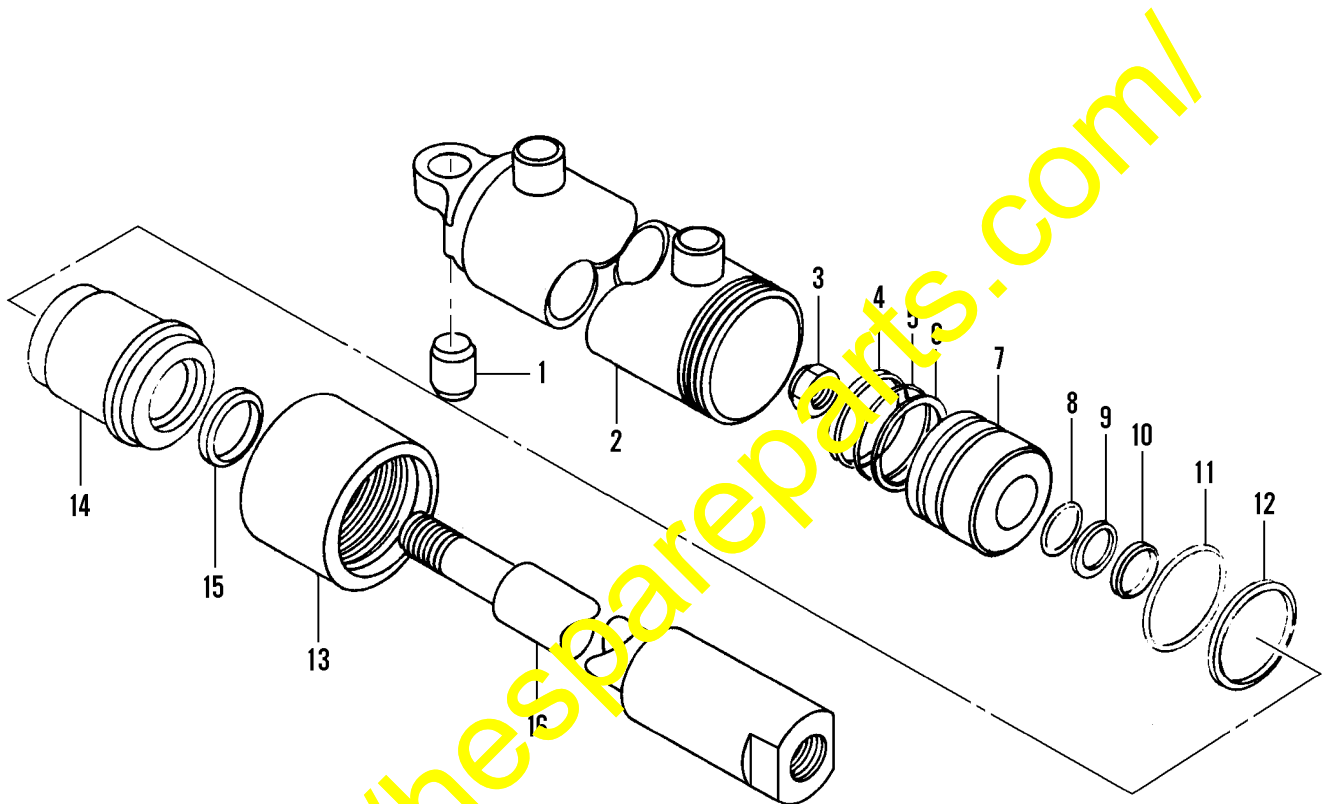
The base end of the steering cylinder was also upgraded to have a snap ring. Cylinder weldment 1437380H91 was replaced with cylinder weldment 1439369H91 and retaining ring 1439371H1.

For individual service part numbers, refer to the subsequent pages of this **PARTS & SERVICE NEWS**. Use this publication along with applicable parts book until such time as this information is incorporated into the parts book.

**– NOTE –**

The information in this **PARTS & SERVICE NEWS** does not authorize or imply any obligation on the part of Komatsu America International Company to provide reimbursement for any expenses. Machines requiring part repair or part replacement during the machine warranty are covered under normal warranty. Out-of-warranty machines are the responsibility of the distributor/customer.

**STEERING CYLINDER**  
GRADER - S/N 203651 & DOWN



**ASSEMBLE SPACERS WITH  
SMALL END TOWARD BEARING**

**NOTE: ZERO CLEARANCE  
AFTER TIGHTENING**

**A10BR005**

**STEERING CYLINDER**  
GRADER - S/N 203651 & DOWN

Item	Part Number	Description	Qty.	Ref.
	163 318	CYLINDER ASSEMBLY, STEERING .....	2	F2
1	62 564	.BUSHING, BALL .....	1	
2	140 274	.CYLINDER WELDMENT .....	1	F3
3	19 687 R1	.NUT, LOCK - TIGHTEN TO 180 FT/LBS WET .....	1	
4	140 260 H45	.RING, PISTON WEAR .....	1	F1
5	364 306 R1	.O-RING .....	1	F1
6	140 259 H45	.RING, PISTON SEALING .....	1	F1
7	140 281	.PISTON .....	1	
8	253 070 R1	.O-RING .....	1	F1
9	272 842 R1	.RING, RETAINING .....	1	
10	140 261	.SEAL, ROD .....	1	F1
11	293 726 R1	.O-RING .....	1	F1
12	140 258	.RING, BACK-UP .....	1	F1
13	140 279	.RING, CLAMP .....	1	
14	163 118	.HEAD, CYLINDER .....	1	
15	140 262	.WIPER, ROD .....	1	F1
16	163 317	.ROD WELDMENT .....	1	
17	140 306	SPACER .....	4	F2,F3

F1 - INCLUDED IN THE FOLLOWING:

1279 402 H91	KIT, CYLINDER SEAL .....	1
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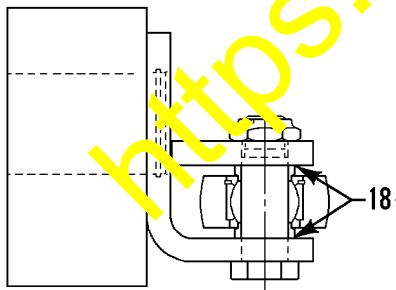
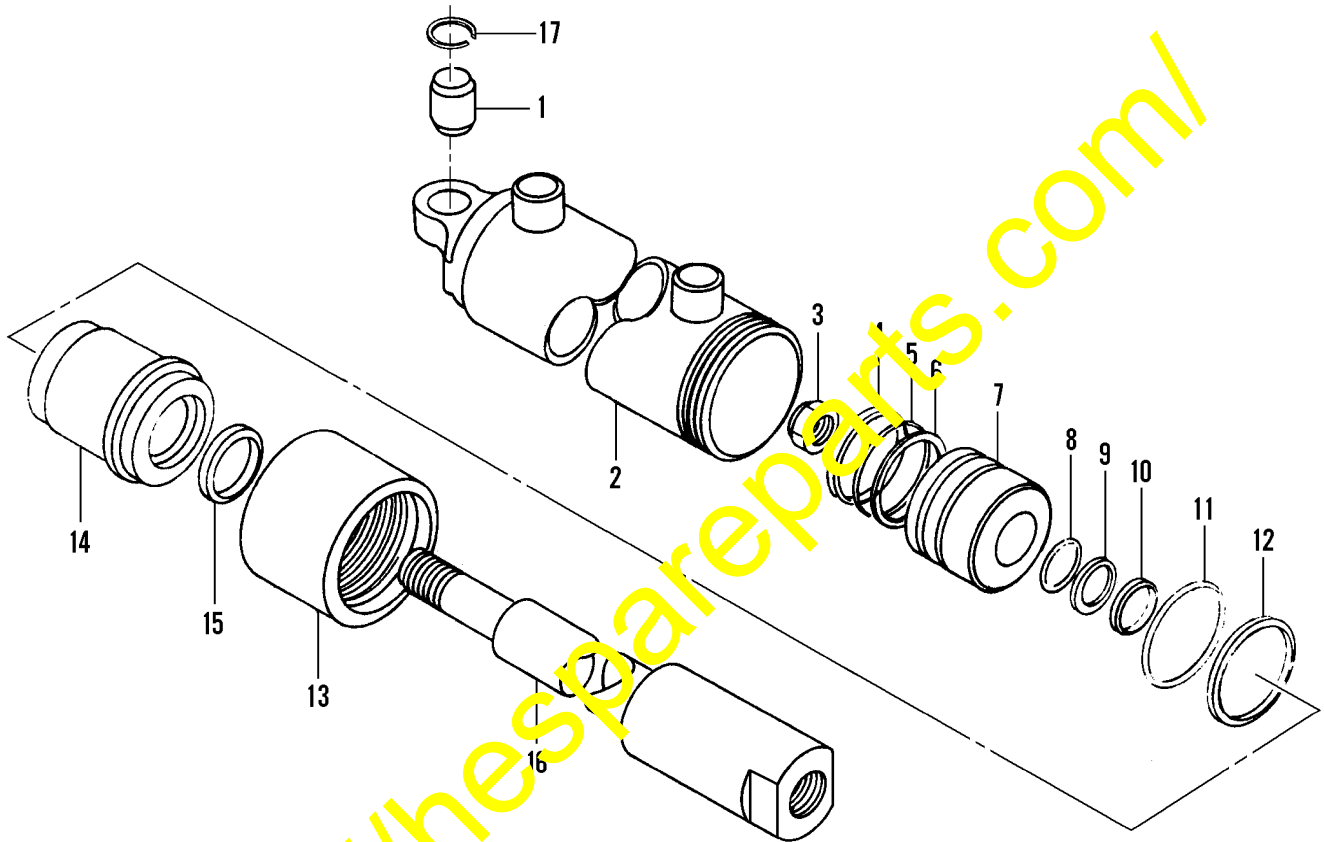
F2 - NO LONGER AVAILABLE, ORDER THE FOLLOWING:

1439 370 H91	CYLINDER ASSEMBLY, STEERING (SEE PAGE 5) ..	2
1438 185 H1	SPACER .....	4

F3 - FOR REPLACEMENT, ORDER THE FOLLOWING:

1439 369 H1	CYLINDER WELDMENT .....	1
1439 371 H1	RING, RETAINING .....	1
1438 185 H1	SPACER .....	2

**STEERING CYLINDER**  
GRADER - S/N 203652 & UP



**ASSEMBLE SPACERS WITH  
SMALL END TOWARD BEARING**

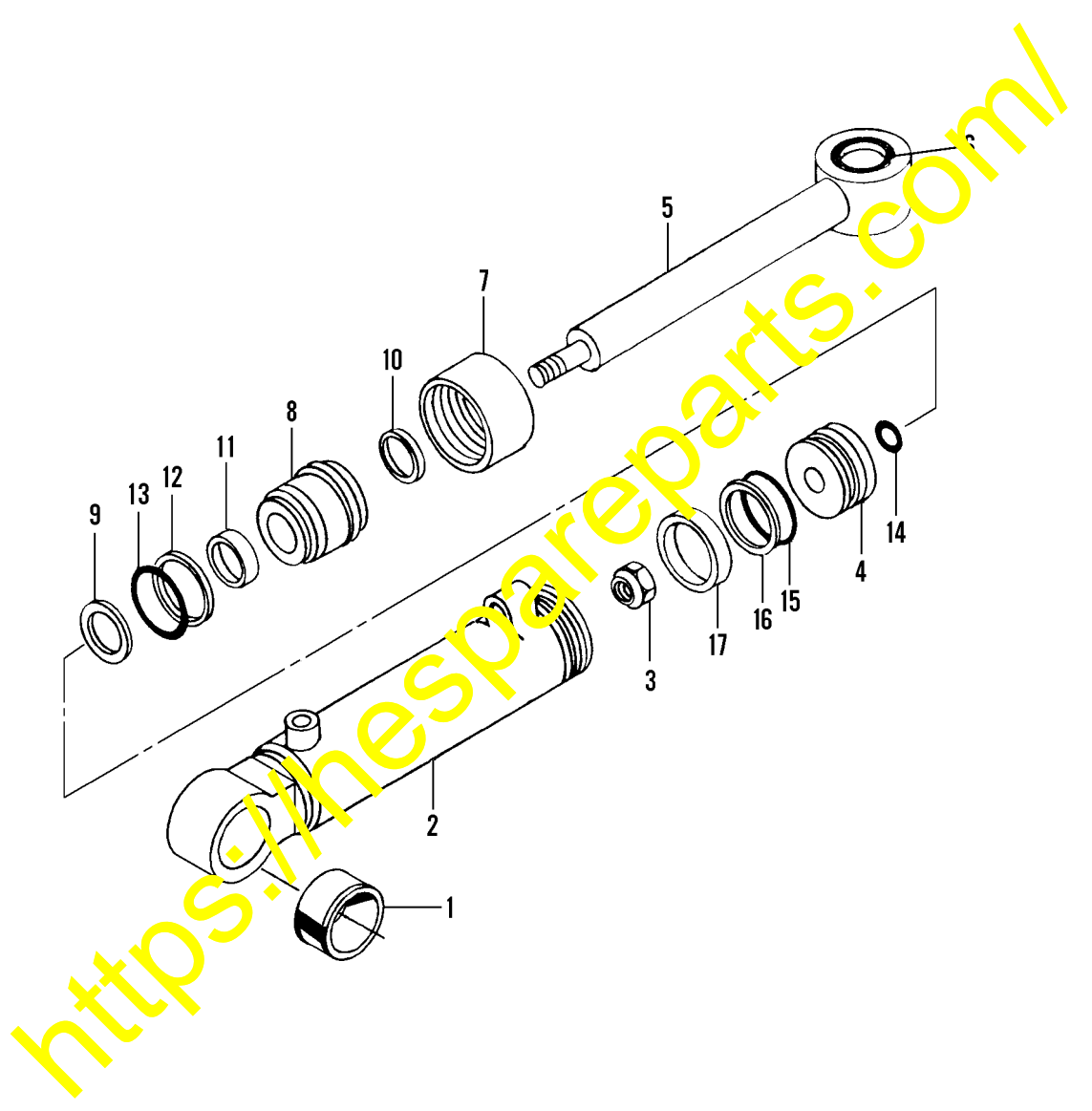
**NOTE: ZERO CLEARANCE  
AFTER TIGHTENING**

**A10BR006**

**STEERING CYLINDER**  
GRADER - S/N 203651 & UP

Item	Part Number	Description	Qty.	Ref.
	1439 370 H91	CYLINDER ASSEMBLY, STEERING .....	2	
1	62 564	.BUSHING, BALL .....	1	
2	1439 369 H91	.CYLINDER WELDMENT .....	1	
3	19 687 R1	.NUT, LOCK - TIGHTEN TO 180 FT/LBS WET .....	1	
4	140 260 H45	.RING, PISTON WEAR .....	1	F1
5	364 306 R1	.O-RING .....	1	F1
6	140 259 H45	.RING, PISTON SEALING .....	1	F1
7	140 281	.PISTON .....	1	
8	253 070 R1	.O-RING .....	1	F1
9	272 842 R1	.RING, RETAINING .....	1	
10	140 261	.SEAL, ROD .....	1	F1
11	293 726 R1	.O-RING .....	1	F1
12	140 258	.RING, BACK-UP .....	1	F1
13	140 279	.RING, CLAMP .....	1	
14	163 118	.HEAD, CYLINDER .....	1	
15	140 262	.WIPER, ROD .....	1	F1
16	163 317	.ROD WELDMENT .....	1	
17	1439 371 H1	.RING, RETAINING .....	1	
18	1438 185 H1	SPACER .....	4	
		F1 - INCLUDED IN THE FOLLOWING:		
	1279 402 H91	KIT, CYLINDER SEAL .....	1	

**STEERING CYLINDER**  
CRANE - ROCKWELL AXLE - S/N 10755 THRU 11000

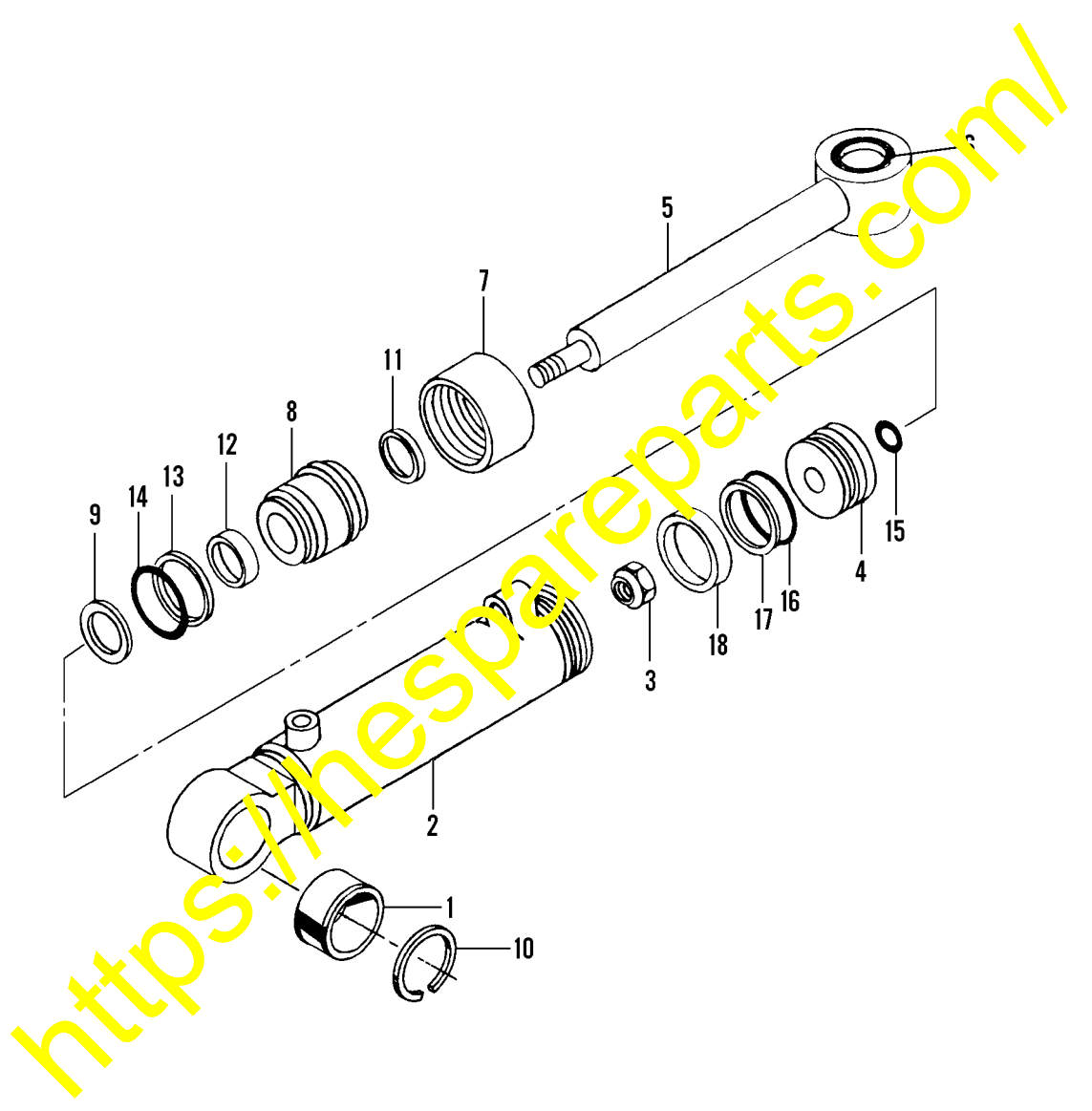


**G10BR013**

**STEERING CYLINDER**  
CRANE - ROCKWELL AXLE - S/N 10755 THRU 11000

Item	Part Number	Description	Qty.	Ref.
	1437 379 H91	CYLINDER ASSEMBLY, STEERING .....	4	F1
1	62 564	..BUSHING .....	1	
2	1437 380 H91	..CYLINDER WELDMENT .....	1	F2
3	19 687 R1	..NUT, LOCK - TIGHTEN TO 180 LBF FT .....	1	
4	140 281	..PISTON .....	1	
5	1437 381 H91	..ROD, PISTON .....	1	
6	62 564	..BUSHING .....	1	
7	140 279	..RING, CLAMP .....	1	
8	163 118	..HEAD, CYLINDER .....	1	
9	272 842 R1	..RING, RETAINING .....	1	
	1279 402 H91	..KIT, CYLINDER SEAL .....	1	
10	140 262	..WIPER, ROD .....	1	
11	140 261	..SEAL, ROD .....	1	
12	140 258	..RING, BACK-UP .....	1	
13	293 726 R1	..O-RING .....	1	
14	253 070 R1	..O-RING .....	1	
15	364 306 R1	..O-RING .....	1	
16	140 259 H45	..RING, PISTON .....	1	
17	140 260 H45	..RING, PISTON WEAR .....	1	
		F1 - NO LONGER AVAILABLE, ORDER THE FOLLOWING:		
	1439 368 H91	CYLINDER ASSEMBLY, STEERING (SEE PAGE 9) ..	4	
		F2 - FOR REPLACEMENT, ORDER THE FOLLOWING:		
	1439 367 H91	CYLINDER WELDMENT .....	1	
	1439 371 H1	..RING, RETAINING .....	1	

**STEERING CYLINDER**  
CRANE - ROCKWELL AXLE - S/N 11001 & UP



**A10BR004**



**STEERING CYLINDER**  
**CRANE - ROCKWELL AXLE - S/N 11000 & UP**

Item	Part Number	Description	Qty.	Ref.
	1439 368 H91	CYLINDER ASSEMBLY, STEERING .....	4	
1	62 564	..BUSHING .....	1	
2	1439 367 H91	..CYLINDER WELDMENT .....	1	
3	19 687 R1	..NUT, LOCK - TIGHTEN TO 180 LBF FT .....	1	
4	140 281	..PISTON .....	1	
5	1437 381 H91	..ROD, PISTON .....	1	
6	62 564	..BUSHING .....	1	
7	140 279	..RING, CLAMP .....	1	
8	163 118	..HEAD, CYLINDER .....	1	
9	272 842 R1	..RING, RETAINING .....	1	
10	1439 371 H1	..RING, RETAINING .....	1	
	1279 402 H91	..KIT, CYLINDER SEAL .....	1	
11	140 262	..WIPER, ROD .....	1	
12	140 261	..SEAL, ROD .....	1	
13	140 258	..RING, BACK-UP .....	1	
14	293 726 R1	..O-RING .....	1	
15	253 070 R1	..O-RING .....	1	
16	364 306 R1	..O-RING .....	1	
17	140 259 H45	..RING, PISTON .....	1	
18	140 260 H45	..RING, PISTON WEAR .....	1	