

PARTS & SERVICE NEWS

REF NO.	AA97091A
DATE	March 4, 1999

Page 1 of 21

This Parts & Service News supercedes AA97091 dated July 9, 1997 and should be discarded.

SUBJECT: AWD PUMP

PURPOSE: To provide service parts for AWD Pump on the below listed graders and for lower serial number graders which have had the new pump installed. See **PARTS & SERVICE NEW AA97090**.

APPLICATION: GD530AW Graders Serial Number 202584 & Up
 GD650AW Graders Serial Number 202584 & Up
 GD670AW Graders Serial Number 202584 & Up
 830 Graders Serial Number 202584 & Up
 850 Graders Serial Number 202584 & Up
 870 Graders Serial Number 202584 & Up

FAILURE CODE: K10099

DESCRIPTION:

Introduction:

The AWD Pump has been upgraded with Turcon Glyd rings which consists of a centering ring and an o-ring backed seal ring on each end of the stroking piston. It takes a special tool to remove/install the Turcon Glyde rings which take the place the bushings in the previous version. Because of the different machining requirements the housing is no longer serviced. Also, the part number for the stroking piston itself has been changed. The Turcon Glyde ring is considered a wear item and is included in the seal kit.

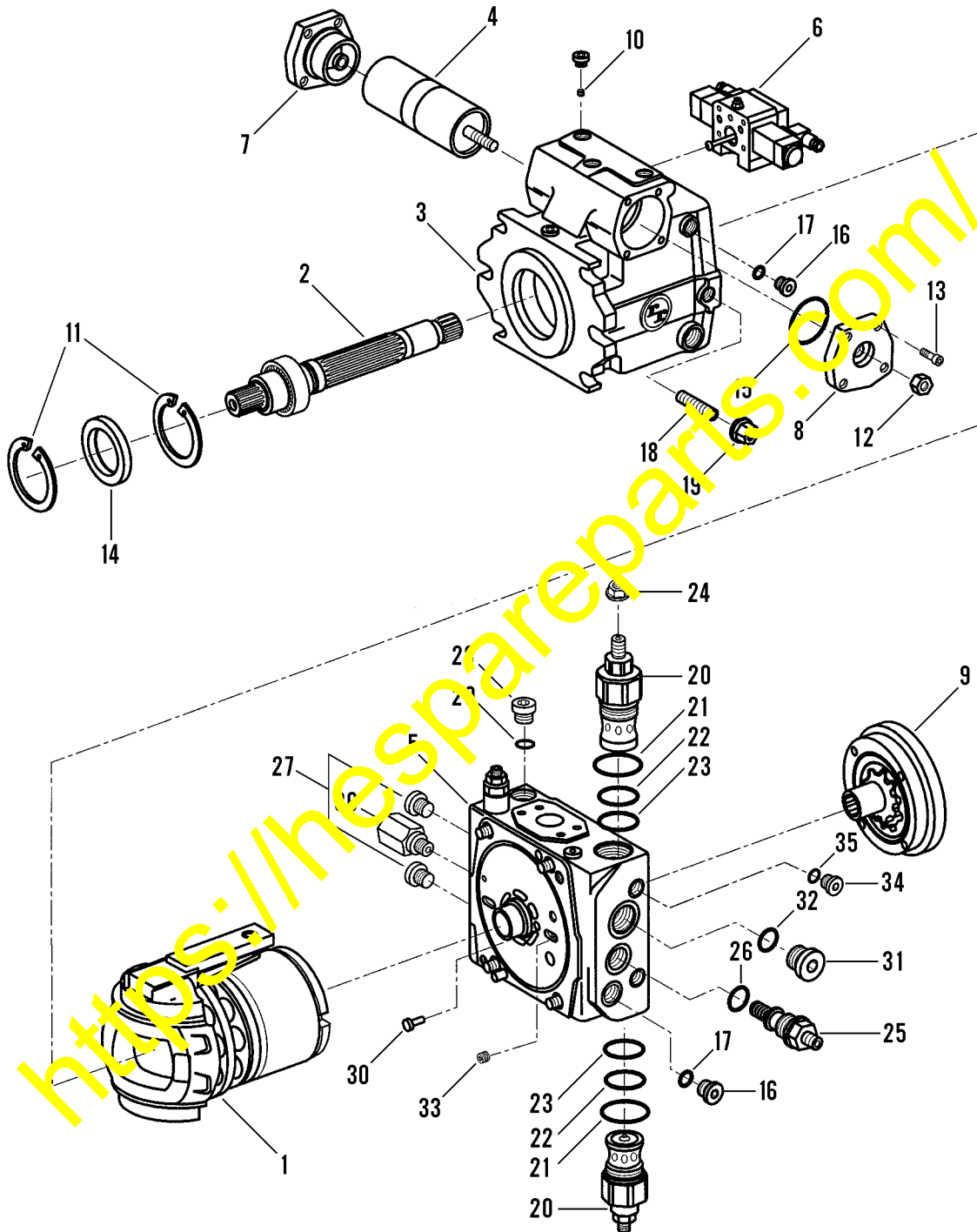
The new version of the stroking piston has its edges beveled so they don't catch on the Turcon Glyde rings. If you put an old style stroking piston in a Turcon unit, you will end up damaging the rings because the old style stroking piston had very sharp square edges. It is possible, however, to put a new Turcon version stroking piston in an older bushing unit without any problem.

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.

AWD PUMP

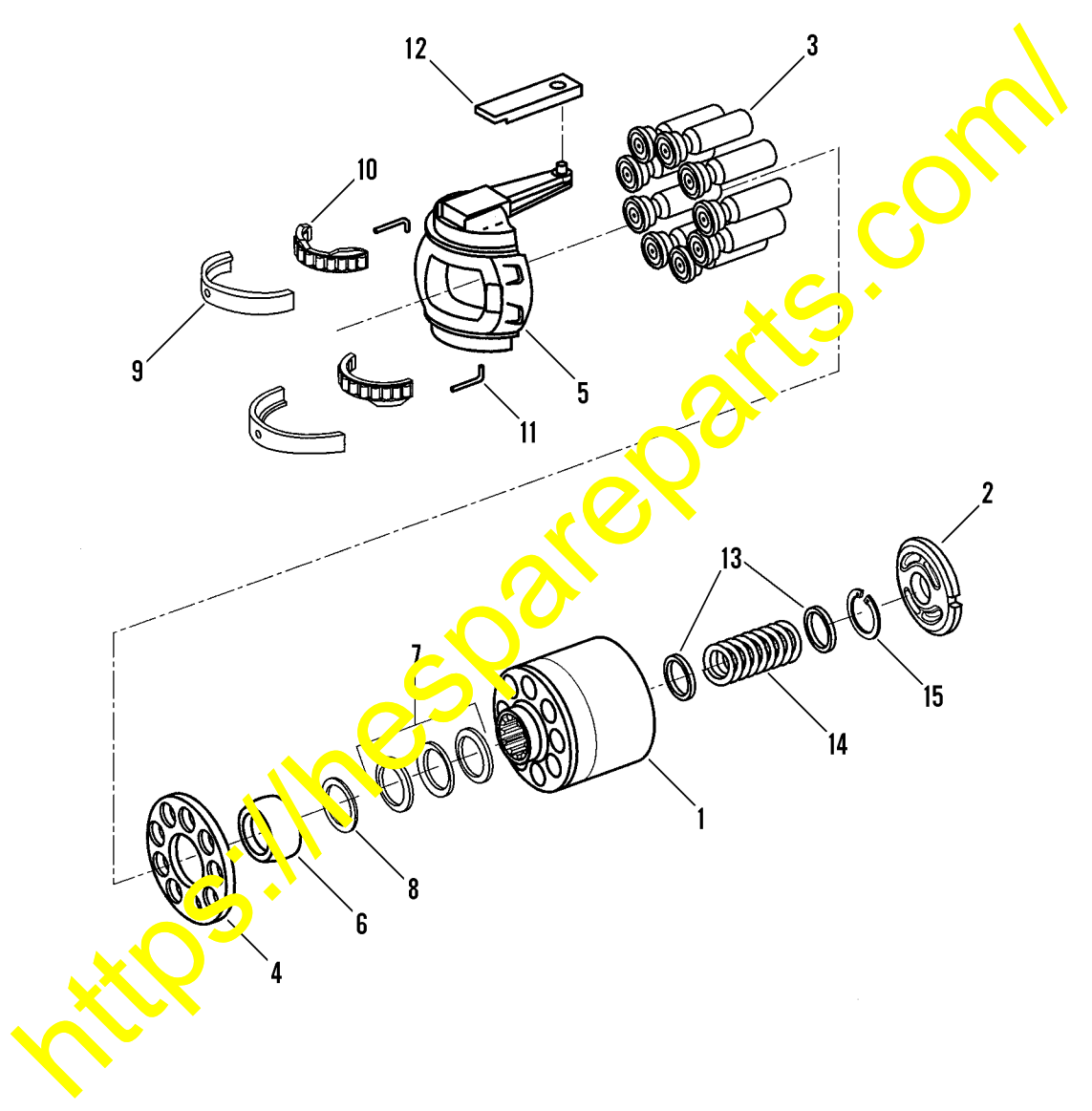


A10AV031

AWD PUMP

Item	Part Number	Description	Qty.	Ref.
	1436 204 H92	PUMP ASSEMBLY, AWD	1	
1		.ROTARY GROUP (SEE PG 10-5)		
2		.SHAFT ASSEMBLY (SEE PG 10-7)		
3		.HOUSING ASSEMBLY (SEE PG 10-9)		
4		.STROKING PISTON ASSEMBLY (SEE PG 10-11)		
5		.PORT BLOCK ASSEMBLY (SEE PG 10-13)		
6		.EP2 CONTROL (SEE PG 10-15)		
7	1438 657 H91	.COVER KIT, STROKING PISTON	1	
8	1438 658 H91	.COVER KIT, STROKING PISTON	1	
9		.PUMP ASSEMBLY, CHARGE (SEE PG 10-17)		
10	1438 660 H1	.ORIFICE, STROKING - 1.0 MM	2	
11	933 847 R1	.RING, RETAINING	2	
12	30 170 R1	.NUT, JAM	1	
13	30 002 R1	.BOLT	8	
14	1438 661 H1	.SEAL, SHAFT	1	F1
15	27 752 R1	.O-RING	2	F1
16	59 198	.PLUG	2	
17	570 828 R1	.O-RING	2	F1
18	1438 662 H1	.PIN, THREADED	1	
19	1434 153 H1	.NUT, SEAL	1	F1
20	134 306	.VALVE, RELIEF	1	
21	25 423 R1	.O-RING	1	F1
22	346 839 R1	.RING, BACKUP	1	F1
23	383 219 R1	.O-RING	1	F1
24	30 410 R1	.NUT, JAM	1	
25	1438 663 H91	.VALVE, CHARGE PRESSURE RELIEF	1	
26	383 219 R1	.O-RING	1	F1
27	1438 664 H1	.PLUG	2	
28	72 432	.PLUG	1	
29	368 269 R1	.O-RING	1	F1
30	425 963 A32	.PIN, LOCATING	1	
31	1269 104 H1	.PLUG	1	
32	25 423 R1	.O-RING	1	F1
33	1438 665 H1	.PLUG	1	
34	90 966	.PLUG	2	
35	369 751 R1	.O-RING	2	F1
36	1438 666 H1	.ADAPTOR	1	
		F1 - INCLUDED IN THE FOLLOWING:		
	1438 667 H92	KIT, SEAL	1	

AWD PUMP - ROTARY GROUP



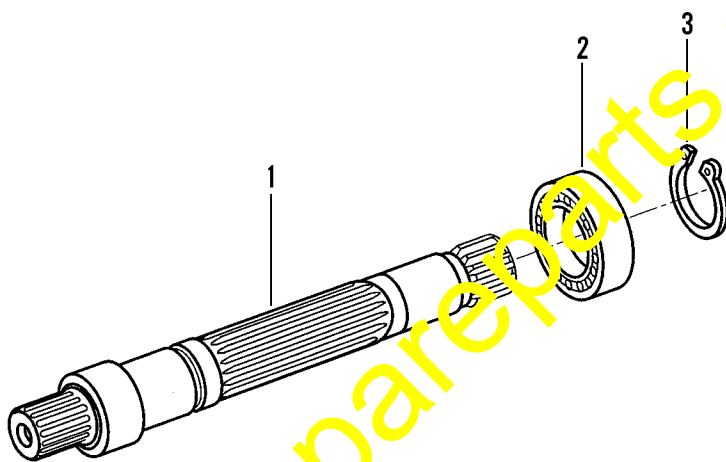
A10AV032

AWD PUMP - ROTARY GROUP

Item	Part Number	Description	Qty.	Ref.
	1438 651 H91	ROTARY GROUP, AWD PUMP	1	
1	1438 668 H1	.BARREL	1	
2	1438 669 H1	.LENS	1	
3	1438 670 H1	.PISTON	9	
4	1438 671 H1	.PLATE, RETAINING	1	
5	1438 672 H1	.PLATE, SWASH	1	
6	1438 673 H1	.BALL, RETAINING	1	
7	1438 674 H1	.SPRING STACK, CUP	1	
8	1438 716 H1	.SHIM, PRELOAD - 1.20 MM	1	F1
	1438 675 H1	.SHIM, PRELOAD - 0.95 MM	1	F1
	1438 676 H1	.SHIM, PRELOAD - 0.80 MM	1	F1
	1438 677 H1	.SHIM, PRELOAD - 0.60 MM	1	F1
9	1438 678 H1	.RACE, BEARING	1	
10	1438 679 H1	.BEARING SET, CRADLE	1	
11	1438 680 H1	.WIRE	2	
12	1438 681 H1	.LEVER	1	
13	1438 682 H1	.SHIM	2	
14	1438 683 H1	.SPRING	1	
15	934 440 R1	.RING, RETAINING	1	

F1 - SELECT SHIM TO SET ROTARY GROUP PRELOAD

AWD PUMP - SHAFT ASSEMBLY



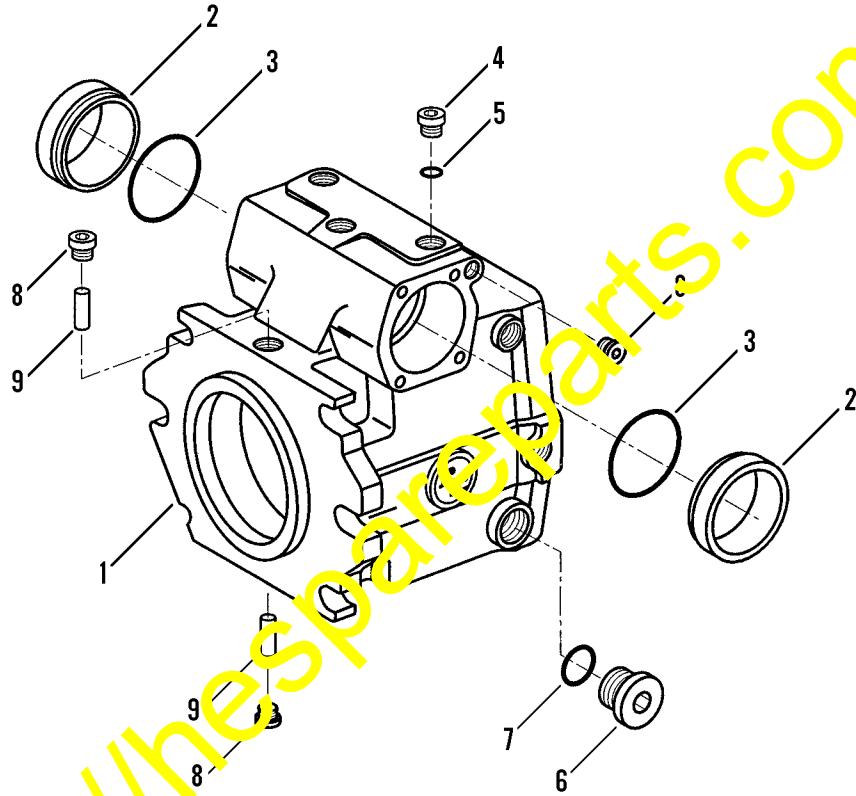
A10AV033

AWD PUMP - SHAFT ASSEMBLY

Item	Part Number	Description	Qty.	Ref.
	1438 652 H91	SHAFT ASSEMBLY, AWD PUMP	1	
1	1438 684 H1	.SHAFT	1	
2	1434 104 H1	.BEARING	1	
3	933 075 R1	.RING, RETAINING	1	

<https://hespareparts.com/>

AWD PUMP - HOUSING ASSEMBLY

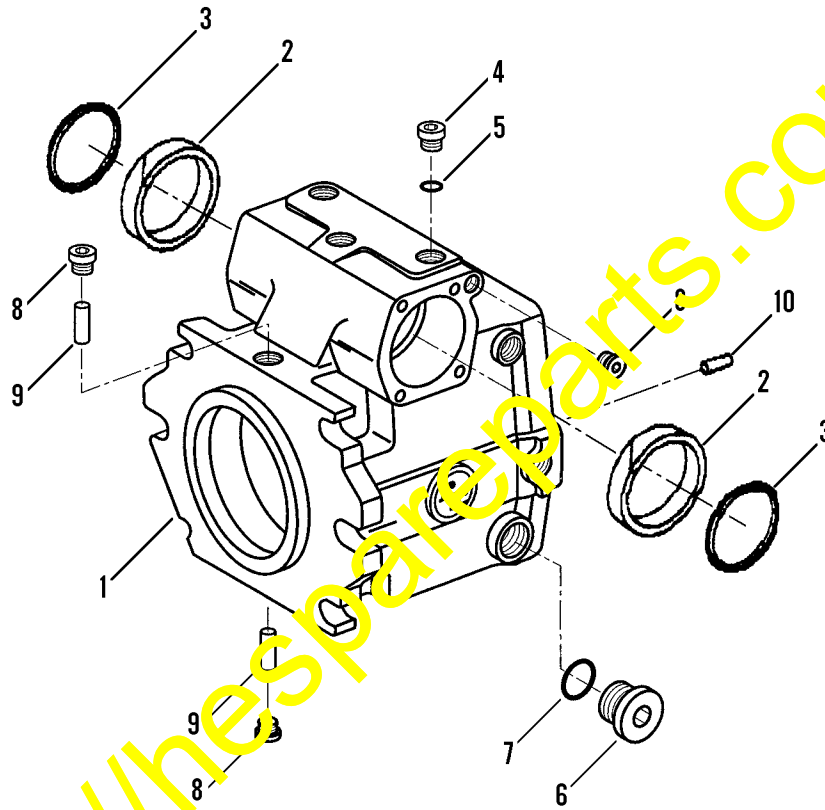


A10AV034

AWD PUMP - HOUSING ASSEMBLY

Item	Part Number	Description	Qty.	Ref.
	1438 653 H91	HOUSING ASSEMBLY, AWD PUMP	1	F2
1	NSS	.HOUSING	1	
2	1438 686 H1	.BUSHING	2	
3	27 752 R1	.O-RING	2	F1
4	90 966	.PLUG	3	
5	369 751 R1	.O-RING	2	F1
6	72 432	.PLUG	1	
7	368 269 R1	.O-RING	1	F1
8	1430 934 H1	.PLUG	4	
9	1438 687 H1	.PIN	2	
		F1 - INCLUDED IN THE FOLLOWING:		
	1438 667 H92	KIT, SEAL	1	
		F2 - NO LONGER AVAILABLE, ORDER THE FOLLOWING:		
	1436 204 H92	PUMP ASSEMBLY, AWD	1	

AWD PUMP - HOUSING ASSEMBLY



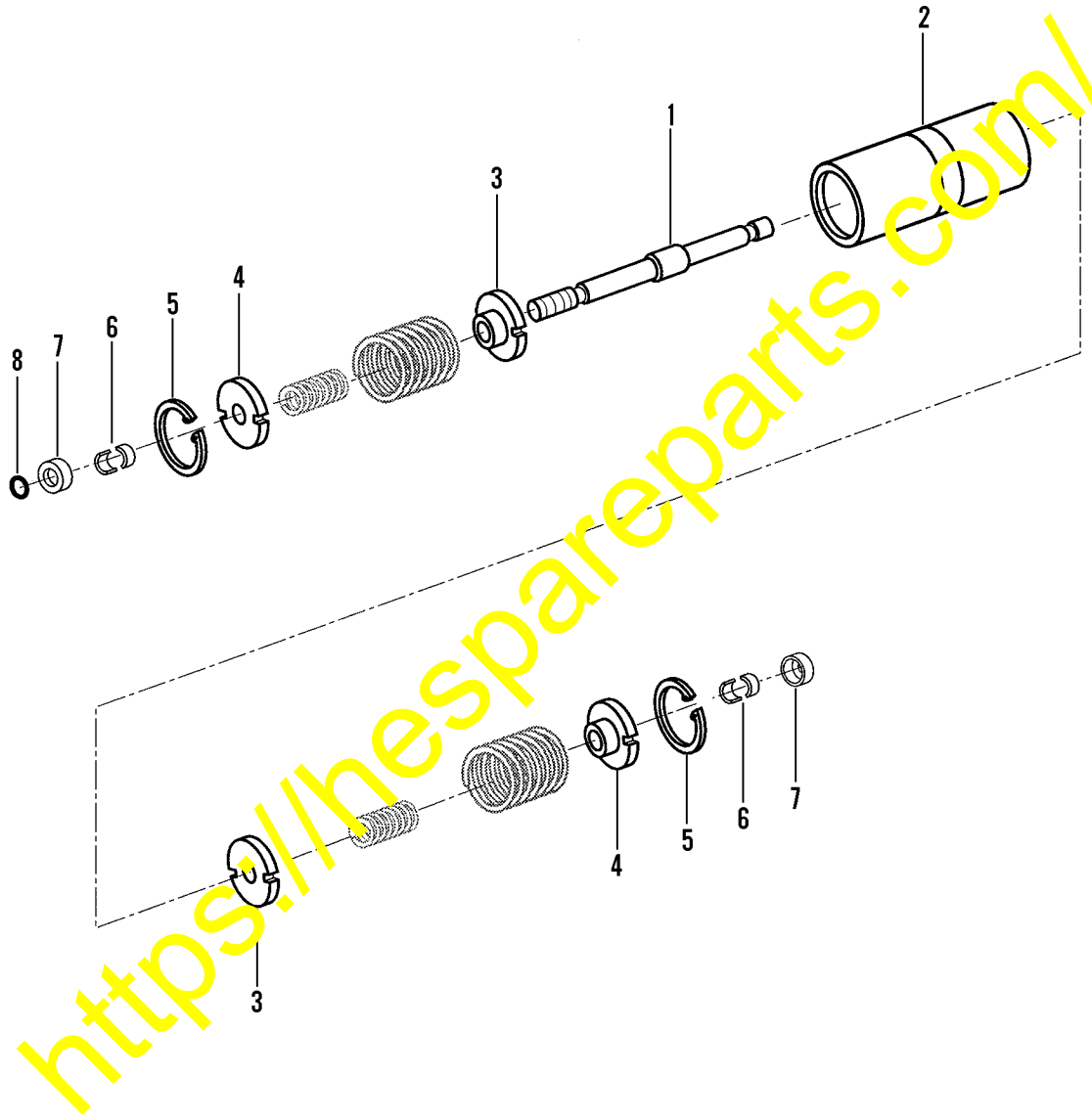
A10AV047

AWD PUMP - HOUSING ASSEMBLY

Item	Part Number	Description	Qty.	Ref.
	1436 204 H92	PUMP ASSEMBLY, AWD	1	
1	NSS	.HOUSING	1	
2	1440 034 H1	.BUSHING	2	
3	1440 035 H1	.RING, TURCON GLYD	2	F1
4	90 966	.PLUG	3	
5	369 751 R1	.O-RING	2	F1
6	72 432	.PLUG	1	
7	368 269 R1	.O-RING	1	F1
8	1430 934 H1	.PLUG	4	
9	1438 687 H1	.PIN	2	
10	BF 1631	.PIN, SPRING	2	
		F1 - INCLUDED IN THE FOLLOWING:		
	1438 667 H92	KIT, SEAL	1	

<https://hespareparts.com/>

AWD PUMP - STROKING PISTON ASSEMBLY



A10AV035

AWD PUMP - STROKING PISTON ASSEMBLY

Item	Part Number	Description	Qty.	Ref.
	1438 654 H91	PISTON ASSEMBLY, AWD PUMP STROKING	1	F3
1	1438 688 H1	.ROD	1	
2	1438 689 H1	.PISTON	1	
3	1438 691 H1	.COLLAR, SPRING	2	
4	1438 690 H1	.COLLAR, SPRING	2	
5	934 429 R1	.RING, RETAINING	1	
6	1438 692 H1	.KEEPERS - 8.00 MM	2	F1
	1438 693 H1	.KEEPERS - 7.85 MM	2	F1
	1438 694 H1	.KEEPERS - 7.90 MM	2	F1
	1438 695 H1	.KEEPERS - 7.95 MM	2	F1
	1438 696 H1	.KEEPERS - 8.05 MM	2	F1
	1438 697 H1	.KEEPERS - 8.10 MM	2	F1
7	1438 698 H1	.RETAINER	2	
8	382 997 R1	.O-RING	1	F2

F1 - SELECT CORRECT KEEPER TO SET RETAINING
PLATE POSITION

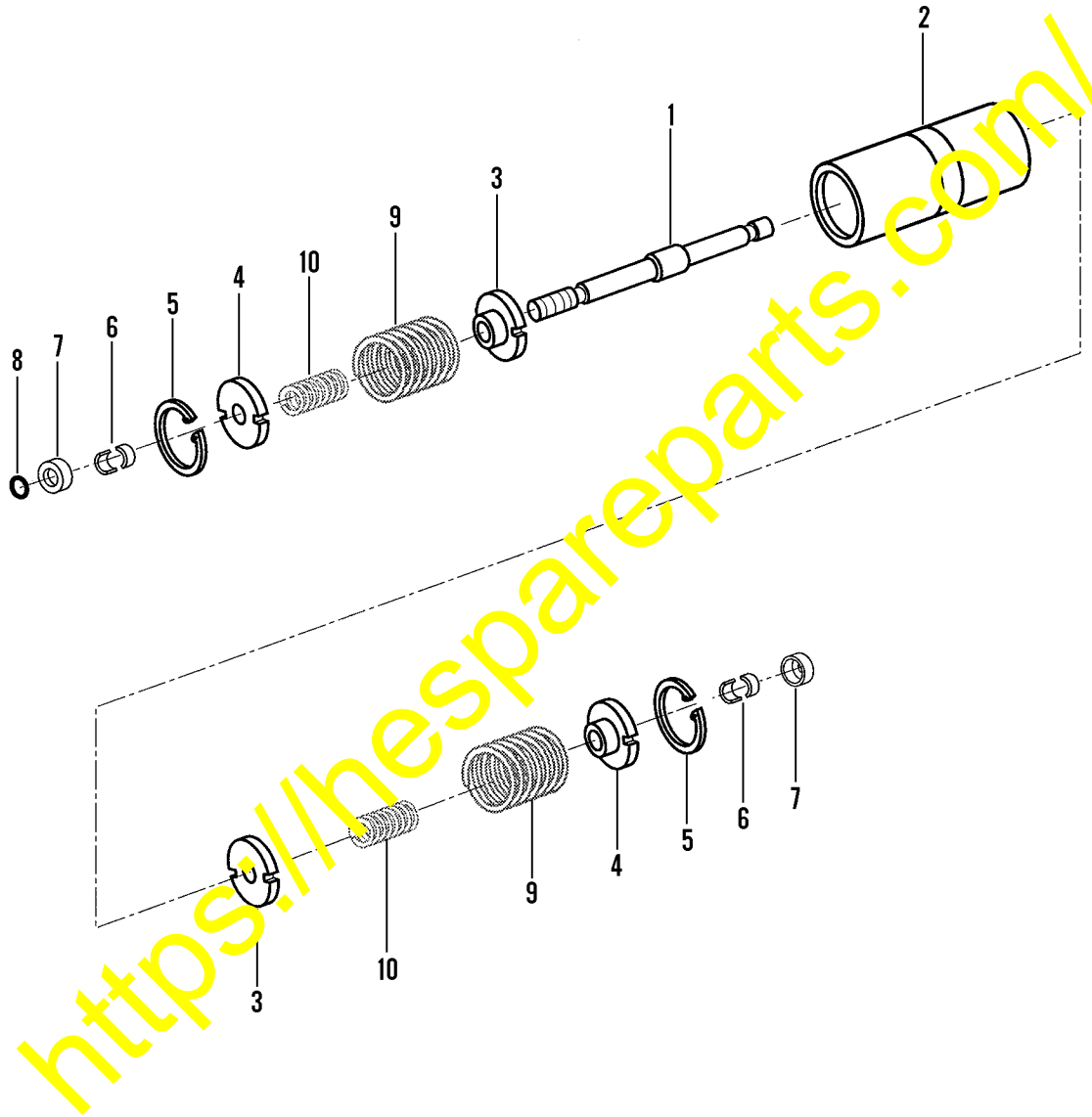
F2 - INCLUDED IN THE FOLLOWING:

1438 667 H92	KIT SEAL	1
--------------	--------------------	---

F3 - NO LONGER AVAILABLE,
ORDER THE FOLLOWING:

1438 654 H92	PISTON ASSEMBLY, AWD PUMP STROKING (SEE PAGE 15)	1
--------------	---	---

AWD PUMP - STROKING PISTON ASSEMBLY



A10AV048

AWD PUMP - STROKING PISTON ASSEMBLY

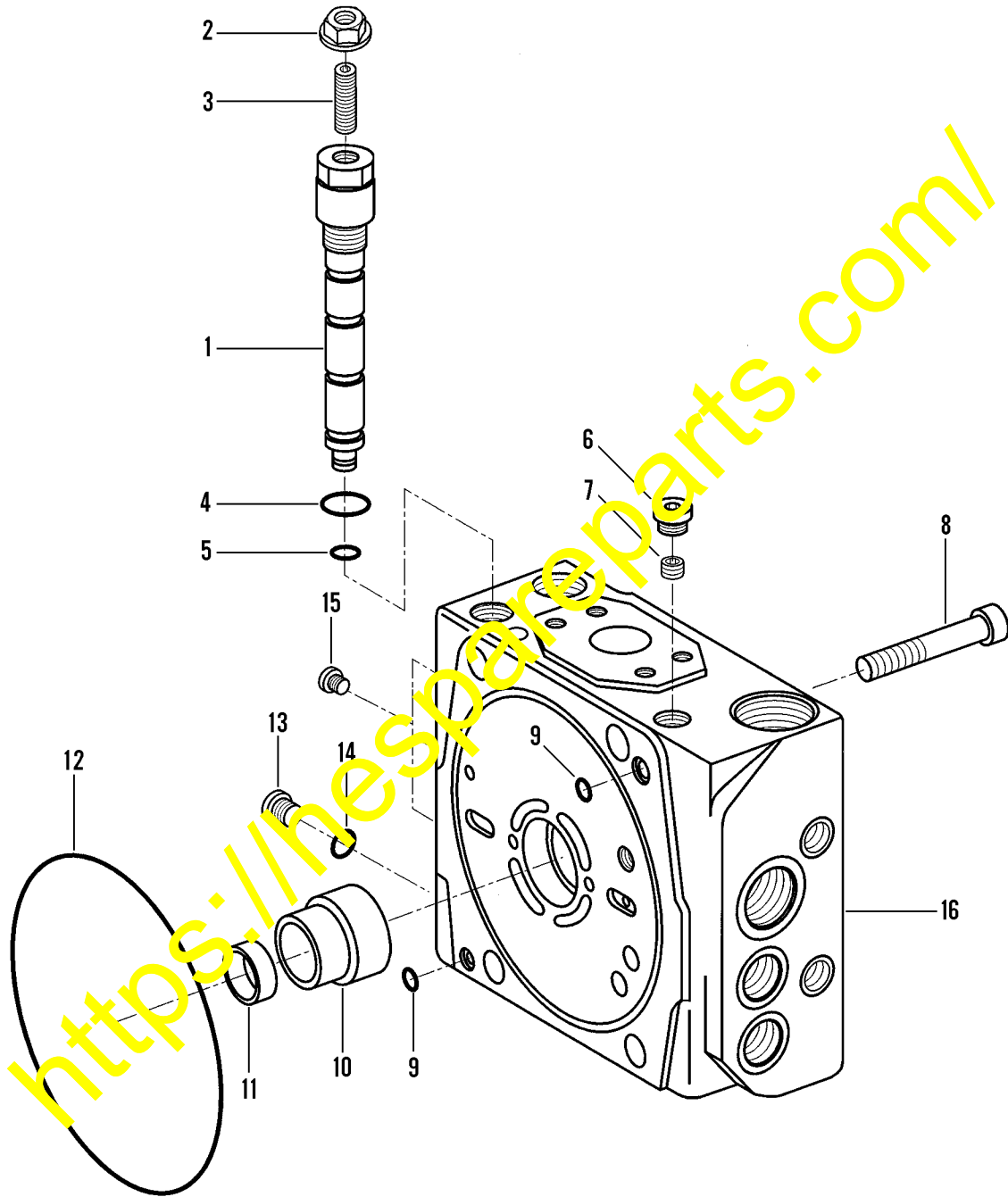
Item	Part Number	Description	Qty.	Ref.
	1438 654 H92	PISTON ASSEMBLY, AWD PUMP STROKING	1	
1	1440 103 H1	.ROD	1	
2	1440 104 H1	.PISTON	1	
3	1440 106 H1	.COLLAR, SPRING	2	
4	1440 105 H1	.COLLAR, SPRING	2	
5	934 429 R1	.RING, RETAINING	1	
6	1440 112 H1	.KEEPERS - 8.00 MM	2	F1
	1440 111 H1	.KEEPERS - 7.85 MM	2	F1
	1440 110 H1	.KEEPERS - 7.90 MM	2	F1
	1440 109 H1	.KEEPERS - 7.95 MM	2	F1
	1440 108 H1	.KEEPERS - 8.05 MM	2	F1
	1440 107 H1	.KEEPERS - 8.10 MM	2	F1
7	1440 113 H1	.RETAINER	2	
8	382 997 R1	.O-RING	1	F2
9	1440 114 H1	.SPRING	2	
10	1440 115 H1	.SPRING	2	

F1 - SELECT CORRECT KEEPER TO SET RETAINING
PLATE POSITION

F2 - INCLUDED IN THE FOLLOWING:

1438 667 H92	KIT, SEAL	1	
--------------	---------------------	---	--

AWD PUMP - PORT BLOCK ASSEMBLY

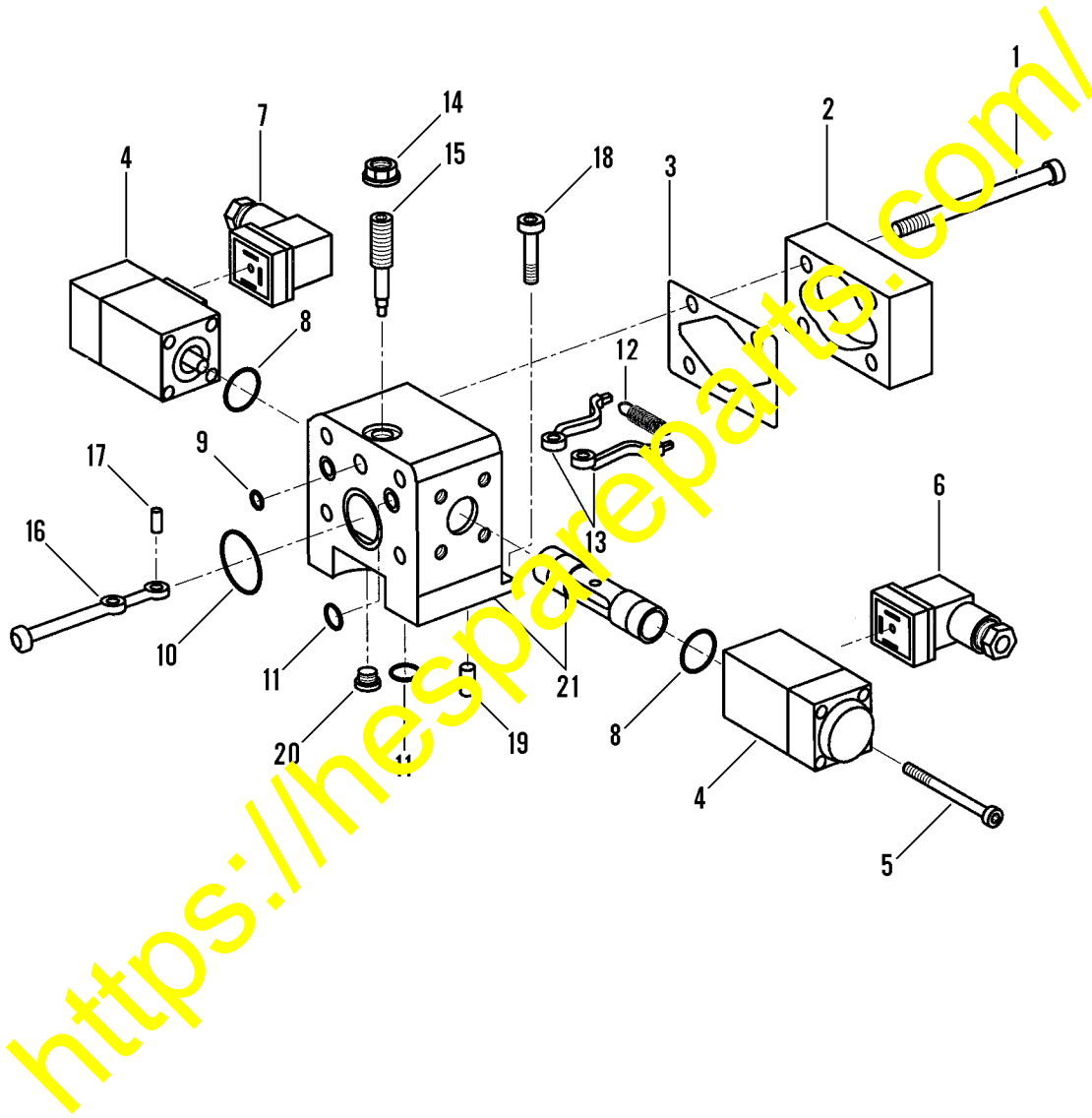


A10AV036

AWD PUMP - PORT BLOCK ASSEMBLY

Item	Part Number	Description	Qty.	Ref.
	1438 655 H91	BLOCK ASSEMBLY, AWD PUMP PORT	1	
1	1438 699 H91	.RELIEF ASSEMBLY, PILOT OPERATED	1	
2	3193 548 R1	..NUT, SEAL	1	
3	1438 700 H1	..SCREW, ADJUSTING	1	F1
4	470 585 R1	..O-RING	2	F1
5	384 937 R1	..O-RING	2	F1
6	1432 516 H1	.PLUG	1	
7	1438 705 H1	.ORIFICE - 1.8 MM	1	
8	1434 149 H1	.BOLT	4	
9	382 997 R1	.O-RING	2	F1
10	1438 702 H1	.SUPPORT, BUSHING	1	
11	1438 703 H1	.BUSHING	1	
12	1438 701 H1	.O-RING	1	F1
13	90 966	.PLUG	1	
14	369 751 R1	.O-RING	1	F1
15	BF 1648	.PLUG	5	
16	1438 704 H1	.BLOCK, PORT	1	
F1 - INCLUDED IN THE FOLLOWING:				
	1438 667 H92	KIT SEAL	1	

AWD PUMP - EP2 CONTROL

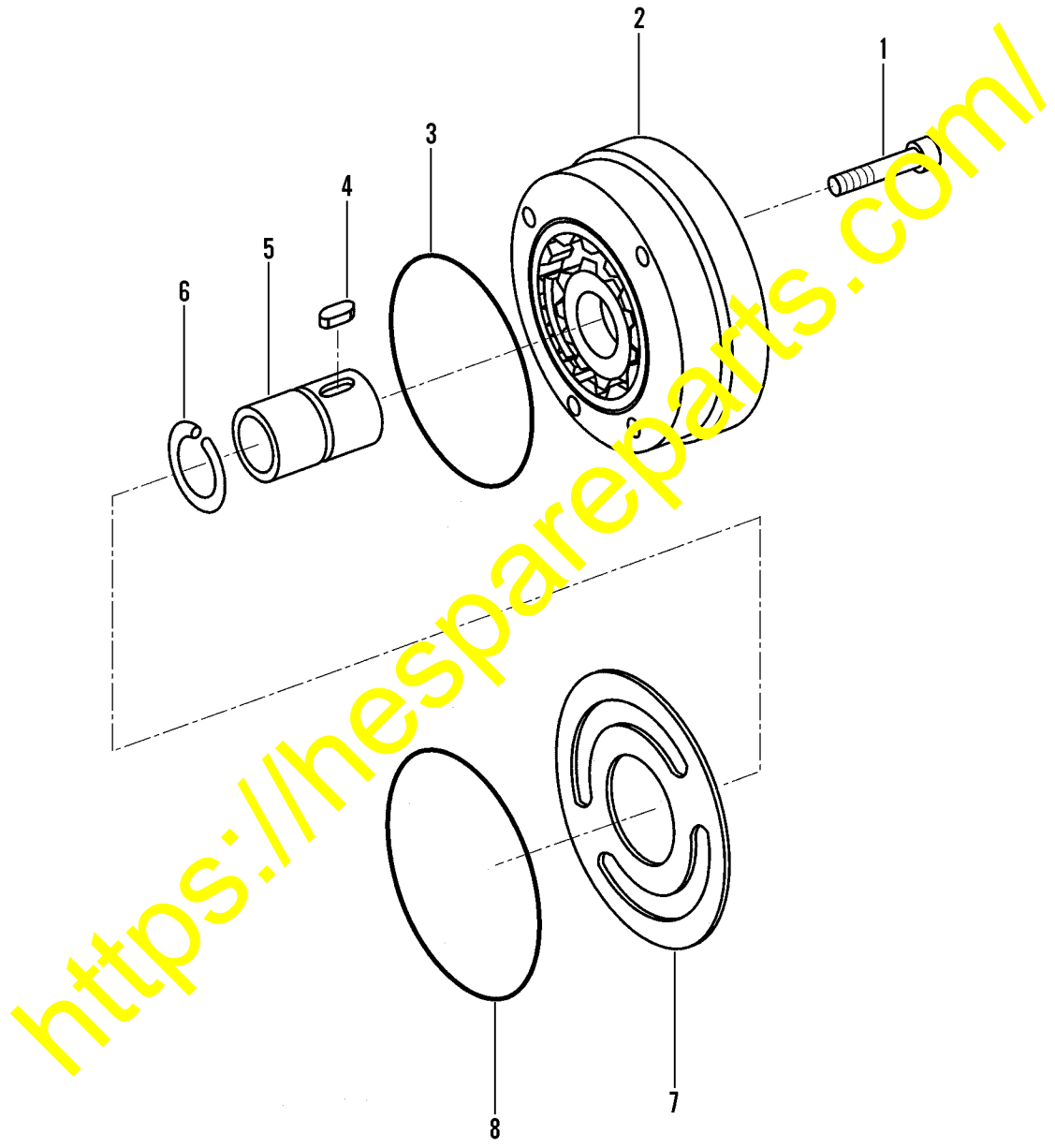


A10AV037

AWD PUMP - EP2 CONTROL

Item	Part Number	Description	Qty.	Ref.
	1438 656 H91	EP2 CONTROL, AWD PUMP	1	
1	1438 708 H1	.BOLT	4	
2	1438 707 H1	.COVER	1	
3	1438 706 H1	.GASKET	1	F1
4	1267 881 H1	.SOLENOID - 24V	1	
5	1438 710 H1	..BOLT	1	
6	134 313	.CONNECTOR - GRAY	1	
7	134 314	.CONNECTOR - BLACK	1	
8	574 069 R1	.O-RING	1	F1
9	352 219 R1	.O-RING	1	F1
10	309 041 R1	.O-RING	1	F1
11	375 271 R1	.O-RING	5	F1
12	1438 711 H1	.SPRING, FEEDBACK	1	
13	1438 718 H1	.ARM, LEVER	2	
14	3193 548 R1	.NUT, SEAL	1	F1
15	1438 719 H1	.SCREW, ECCENTRIC	1	
16	1438 720 H1	.LEVER, FEEDBACK	1	
17	1438 721 H1	.PIN, BEVEL	1	
18	1438 722 H1	.BOLT	2	
19	1434 280 H1	.PIN, DOWEL	1	
20	1438 723 H1	.PLUG, RETAINING	1	
21	NSS	.HOUSING & SPOOL	1	
		F1 - INCLUDED IN THE FOLLOWING:		
	1438 667 H92	KIT, SEAL	1	

AWD PUMP - CHARGE PUMP ASSEMBLY



A10AV038

AWD PUMP - CHARGE PUMP ASSEMBLY

Item	Part Number	Description	Qty.	Ref.
	1438 659 H91	PUMP ASSEMBLY, AWD PUMP CHARGE	1	
1	30 043 R1	.BOLT	4	
2	NSS	.PUMP, CHARGE	1	
3	343 941 R1	.O-RING	1	F1
4	1438 712 H1	.KEY	1	
5	1438 713 H1	.SHAFT, DRIVE	1	
6	1438 714 H1	.RING, RETAINING	1	
7	1438 715 H1	.PLATE, WEAR	1	
8	317 923 R1	.O-RING	1	F1
		F1 - INCLUDED IN THE FOLLOWING:		
	1438 667 H92	KIT, SEAL	1	

<https://hespareparts.com/>