



TA SERIES AIR WINCH PARTS LIST

THERN CUSTOMER SERVICE

hours: 7:30 AM to 5:30 PM CST
toll-free: 800-843-7648
phone: 507-454-2996
fax: 507-454-5282
email: sales@thern.com
web: www.thern.com

THERN PARTS AND SERVICE

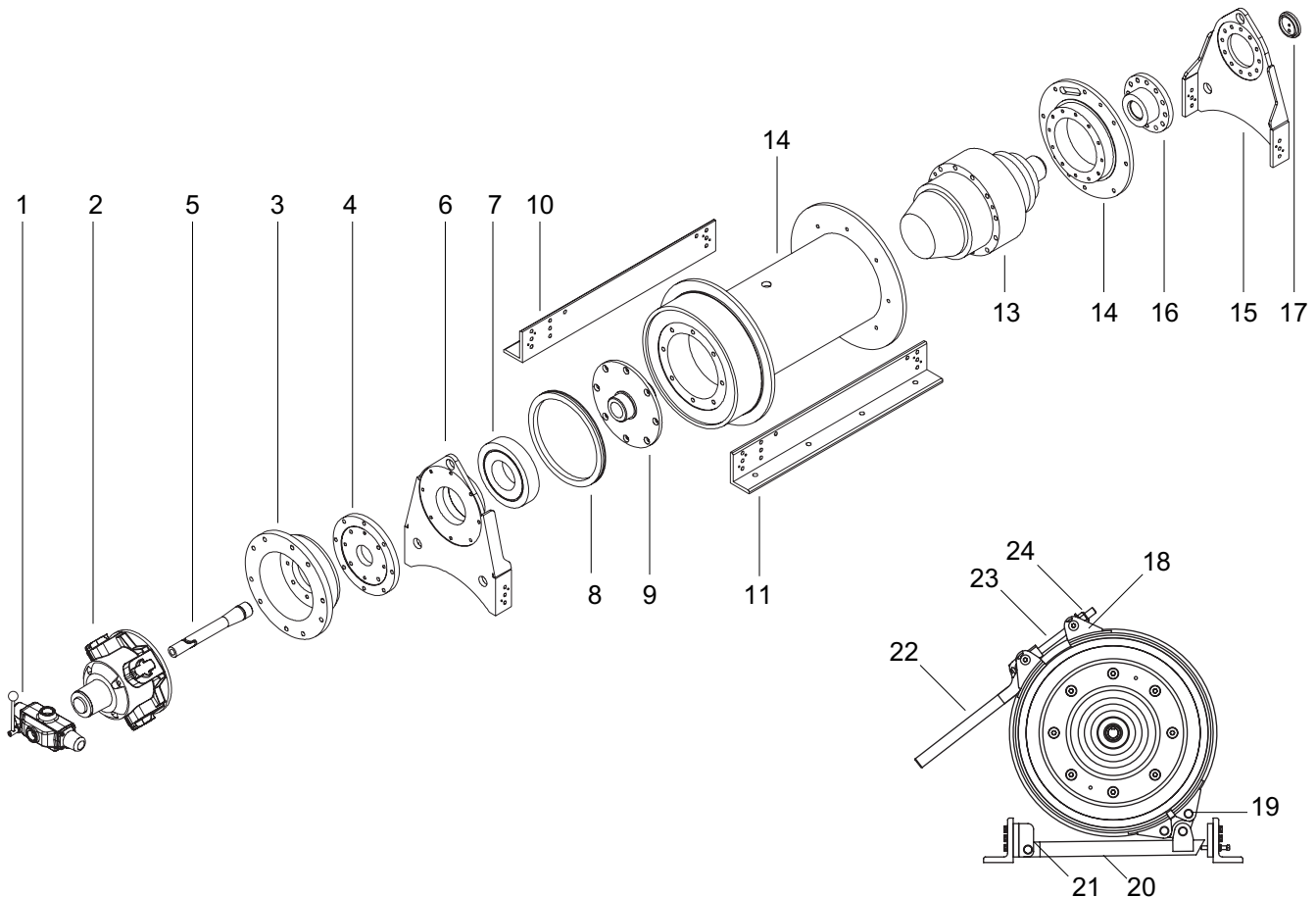
contact: Mike Waldherr
toll-free: 800-843-7648 ext. 213
phone: 507-454-2996 ext. 213
fax: 507-454-5282
email: mwaldherr@thern.com

TA2 SERIES

TA2 ASSEMBLY

item	description	part no.	qty.
1	CONTROL VALVE	B4675	1
2	PISTON AIR MOTOR	C3937	1
3	MOTOR ADAPTER	B4396	1
4	ADAPTER PLATE	B4397	1
5	INPUT SHAFT ASSEMBLY	B4758	1
6	MOTOR END PLATE	D2679	1
7	SEAL OIL CR VR2 TYPE	A8298	1
8	BEARING RADIAL BALL 3.5433 X 6.2992 X 1.1811	A8299	1
9	DRUM SHAFT	B4399	1
10	REAR ANGLE		
10a	REAR ANGLE - 16 INCH DRUM	C4081	1
10b	REAR ANGLE - 24 INCH DRUM	C3979	1
11	FRONT ANGLE		
11a	FRONT ANGLE - 16 INCH DRUM	C4082	1
11b	FRONT ANGLE - 24 INCH DRUM	C3980	1
12	DRUM		
12a	DRUM - 16 INCH DIA.	D2754	1
12b	DRUM - 24 INCH DIA.	D2675	1
13	REDUCER	C3939	1
14	REDUCER MOUNT	C3976	1
15	REDUCER SHAFT HOLDER	B4409	1
16	REDUCER END PLATE	D2677	1
17	SHAFT END CAP	A8380	1
18	BAND BRAKE HALF	C3972	2
19	CLEVIS PINS	A8378	2
20	BRAKE ANCHOR BAR	B4408	1
21	ANCHOR MOUNT	B4405	1
22	BRAKE HANDLE	B4407	1
23	BRAKE TOP LINK	B4404	1
24	BRAKE TENSIONING NUT	B4303	1

TA2 Series Assembly



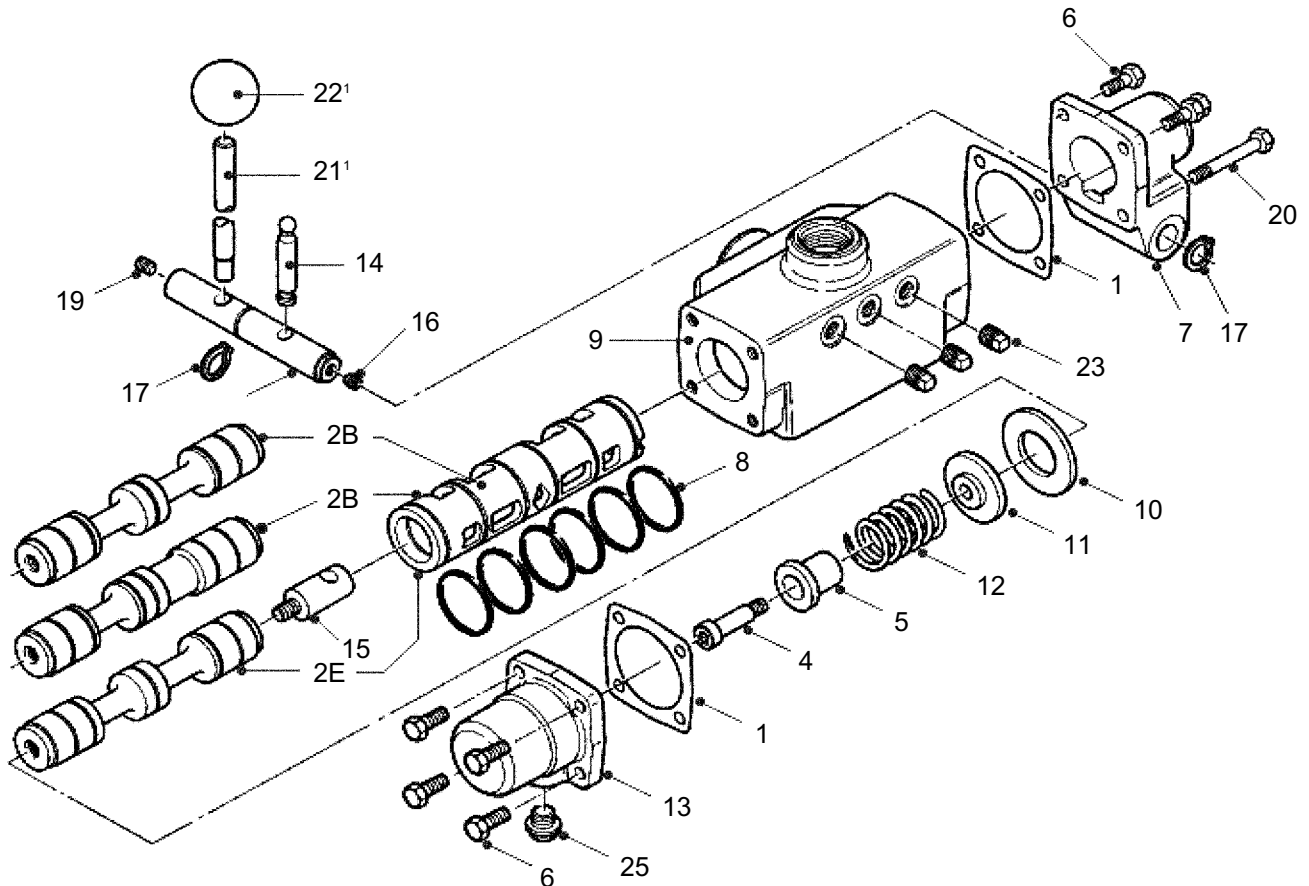
TA2 SERIES

TA2 CONTROL VALVE Part No. B4675

item	description	part no.	qty.
1	END CAP GASKET	311-066	2
2E	MATCHED SPOOL AND SLEEVE	321-913	1
2B	MATCHED SPOOL AND SLEEVE	321-914	1
4	SHOULDER SCREW 10 MM	817-002	1
5	CENTERING SHAFT GUIDE	311-071	1
6	SET SCREW M8 X 20	802-032	6
7	END CAP -PLAIN END	313-041	1
8	O RING 1-9/16X 1-11/16	808-010	6
9	VALVE BODY	321-060	1
10	VALVE SLEEVE SPACER	311-068	1
11	WASHER, SPRING CENTERING	311-072	1
12	SPRING 343720	814-015	1
13	END CAP -SPRING END	311-064	1
14	TOGGLE PIN	313-026	1
15	TOGGLE SHAFT	313-024	1
16	GRUB SCREW M8 X 10	815-010	1
17	CIRCLIP 20MM EXTERNAL	804-013	2
18	HAND LEVER PIVOT	313-008	1
19	GRUB SCEW M8 X 16	815-002	1
20	HEX BOLT M8 X 60	802-045	2
21 ¹	HAND LEVER	313-002	1
22 ¹	BLACK PLASTIC KNOB 1-1/2	818-002	1
23	PLUG 1/4 BSPT SQ. HEAD	816-061	3
25	VENT PLUG	113-050	1

¹ Old-style handle. Most products are shipped with the one piece new-style handle. Order part no. B4558 for handle and part no. A8282 for handle setscrew.

TA2 Control Valve

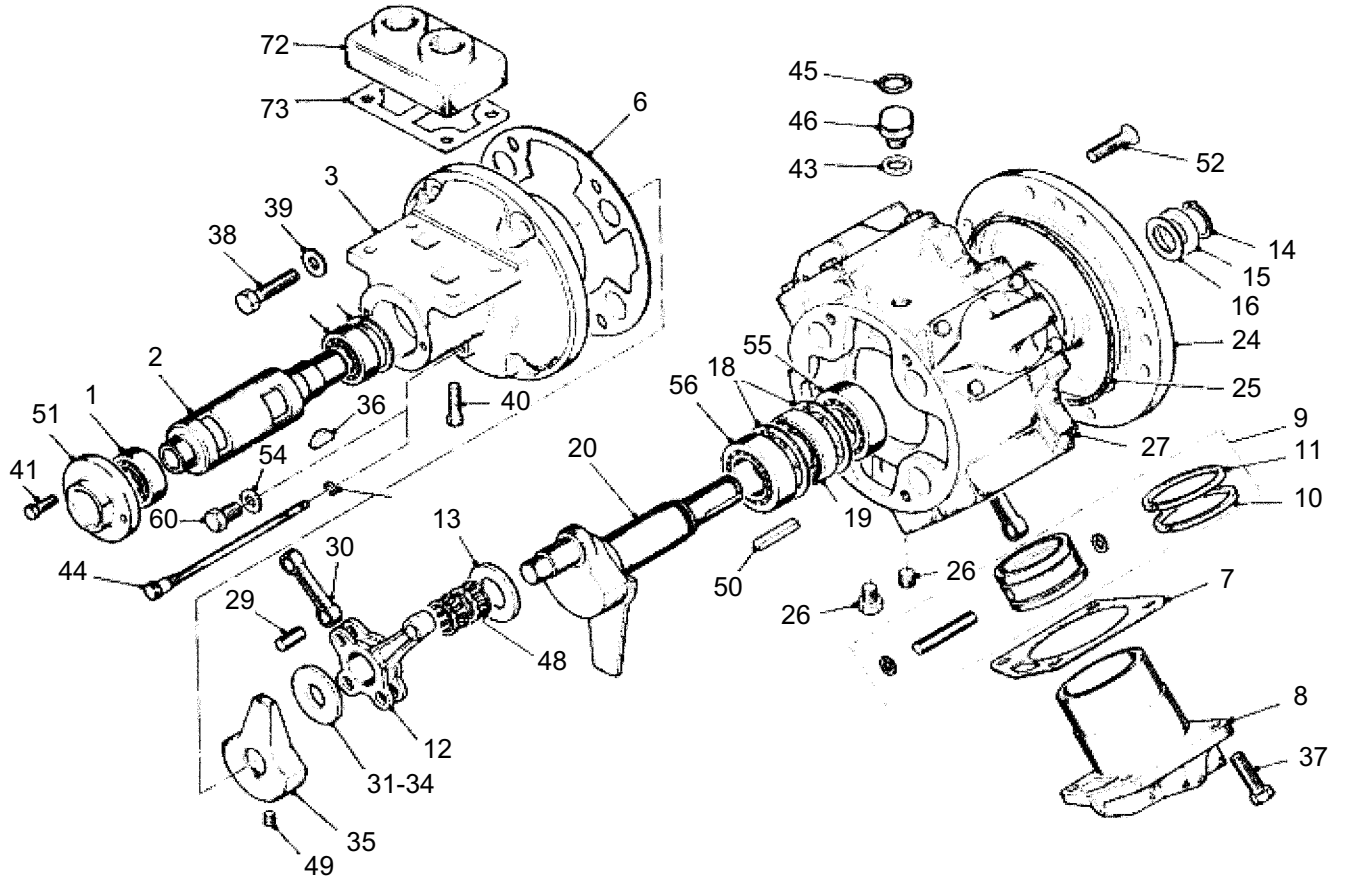


TA2 SERIES

TA2 PISTON AIR MOTOR Part No. C3937

item	description	part no.	qty.	kit no.
1	ROTARY VALVE BEARING (OUTER)	807-002	1	
2	ROTARY VALVE	330-059	1	
3	ROTARY VALVE HOUSING	330-011	1	
4	ROTARY VALVE BEARING (INNER)	807-001	1	
5	ROTARY VALVE BEARING CIRCLIP	804-054	1	
6	ROTARY VALVE HOUSING GASKET	-	1	339-911
7	CYLINDER GASKET		4	339-911
8	CYLINDER	310-082	4	
9	PISTON ASSEMBLY	330-902A	4	
10	COMPRESSION RING	-	4	339-911
11	OIL CONTROL RING	-	4	339-911
12	KING ROD	330-077	1	
13	CRANKSHAFT SPACER	330-013	2	
14	CRANKSHAFT CIRCLIP	804-012	1	
15A	CRANKSHAFT SPACER	310-036	1	
15B	CRANKSHAFT SPACER	310-037	5	
15C	CRANKSHAFT SPACER	310-038	1	
16	CRANKSHAFT SPACER SHIM	310-049	5	
18	CRANKSHAFT BEARING CIRCLIP	804-062	2	
19	OILSEAL	-	1	339-911
20	STD CRANKSHAFT ASSEMBLY	330-911	1	
24	STD FLANGE PLATE	330-076	1	
25	FLANGE PLATE SEAL	-	1	339-911
26	PLUG	816-071	1	
27	ENGINE CASE	330-012	1	
29	QUEEN ROD PIVOT	320-081	3	
30	QUEEN ROD	330-078	3	
31	CRANK SPACER	320-052	1	
32	CRANK SPACER	320-053	1	
34	CRANK SPACER	320-054	1	
35	BALANCE WEIGHT	330-010	1	
36	WOODRUFF KEY	811-010	1	
37	CYLINDER BOLTS	802-053	16	
38	VALVE HOUSING BOLTS	802-053	4	
40	ADAPTOR PLATE BOLT	802-032	4	
41	EXHAUST COVER BOLTS	802-032	2	
45	SEAL (TRANSIT ONLY)	-	1	
46	BREATHER PLUG	130-066	1	
48	NEEDLE BEARING	807-065	1	
49	GRUB SCREW	815-002	1	
50	KEY	811-003	1	
51	ROTARY VALVE EXHAUST COVER	330-005	1	
52	COUNTERSUNK FLANGE BOLT	810-002	8	
55	OUTPUT SHAFT BRG (OUTER)	807-009	1	
56	OUTPUT SHAFT BRG (INNER)	807-009	1	
60	OIL LEVEL PLUG	816-063	2	
72	INLET ADAPTOR PLAT	330-003	1	
73	INLET ADAPTOR PLATE GASKET	-	1	339-911
80	ROTARY VALVE SPACER	330-060	2	

TA2 Series Motor Assembly

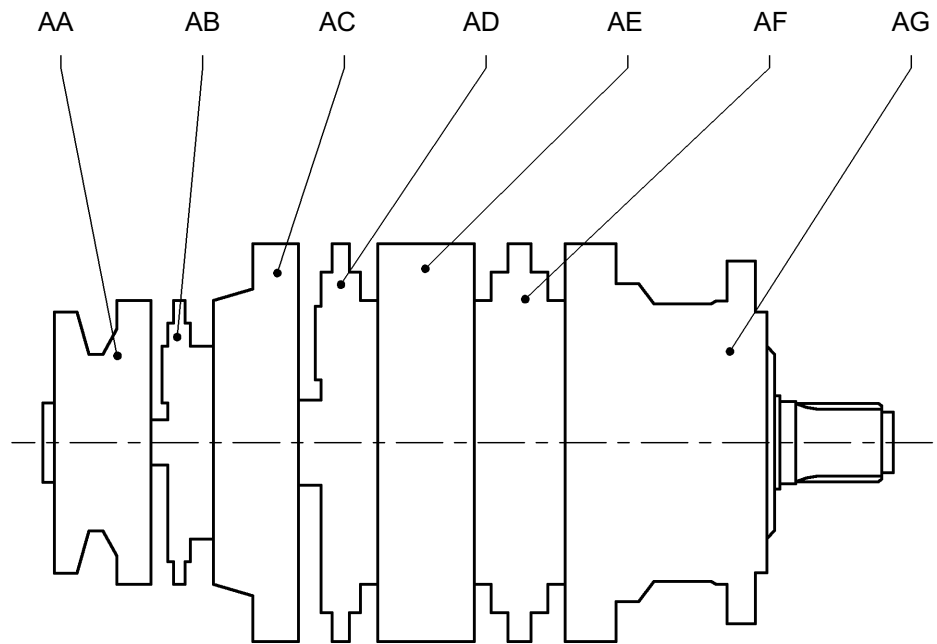


TA2 SERIES

TA2 PLANENTARY GEAR REDUCER ASSEMBLY

item	description	part no.	qty.
AA	GEAR REDUCER SECTION	30-3100	1
AB	GEAR REDUCER SECTION	02-4011	1
AC	GEAR REDUCER SECTION	20-3002	1
AD	GEAR REDUCER SECTION	00-4045	1
AE	GEAR REDUCER SECTION	00-3004	1
AF	GEAR REDUCER SECTION	00-4070	1
AG	GEAR REDUCER SECTION	00-1067	1

TA2 Series Gear Reducer Assembly

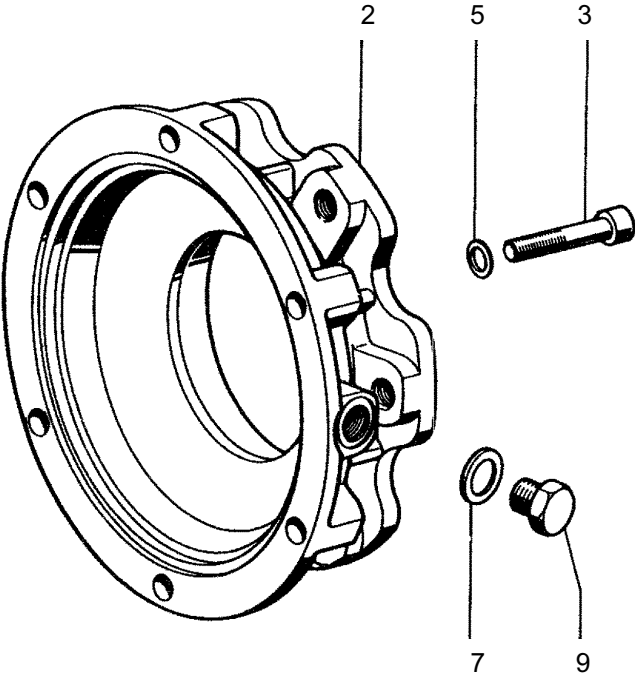


TA2 SERIES

TA2 GEAR REDUCER SECTION AA Part No. 30-3100

item	description	part no.	qty.
2	INPUT FLANGE	34603124000	1
3	SCREW	46208200600	6
5	WASHER	46701000101	6
7	WASHER	41700200100	2
9	PLUG	45104300000	2

TA2 Series Gear Reducer Section AA

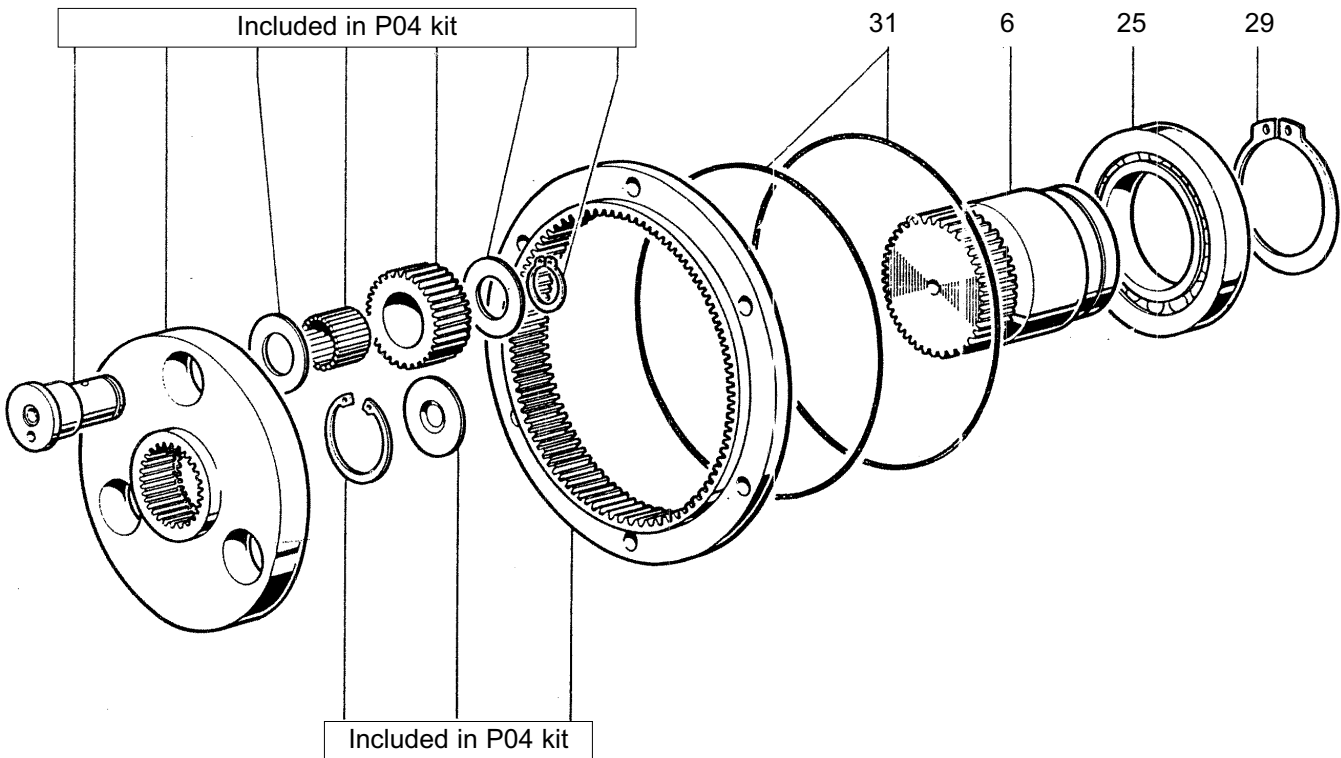


TA2 SERIES

TA2 GEAR REDUCER SECTION AB Part No. 02-4011

item	description	part no.	qty.
P04	SUBASSEMBLY – 6.93 RATIO	211B4300000	1
1	RING-GEAR	32000538300	1
6	PINION	32603241900	1
25	BEARING	42119300000	1
29	CIRCLIP	43106300000	1
31	GASKET	36610340000	2

TA2 Series Gear Reducer Section AB



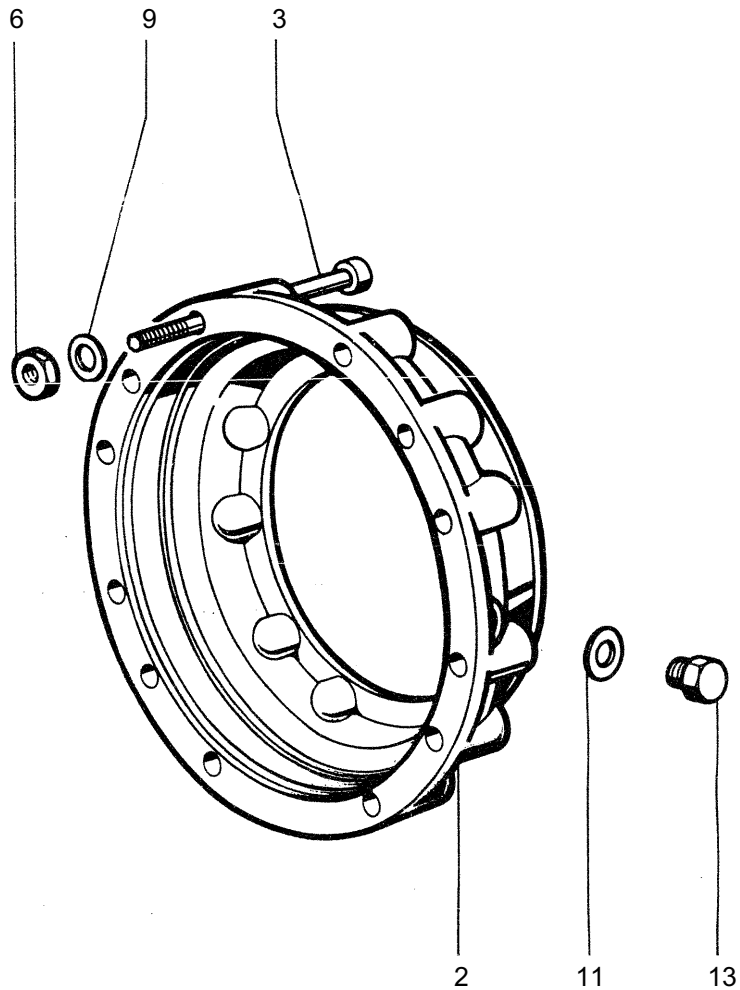
TA2 SERIES

TA2 GEAR REDUCER SECTION AC

Part No. 20-3002

item	description	part no.	qty.
2	INTERMED.FLANGE	34207324000	1
3	SCREW	46212100600	8
6	NUT	46600800100	8
9	WASHER	46701100101	8
11	WASHER	41700200100	3
13	PLUG	45104300000	3

TA2 Series Gear Reducer Section AC

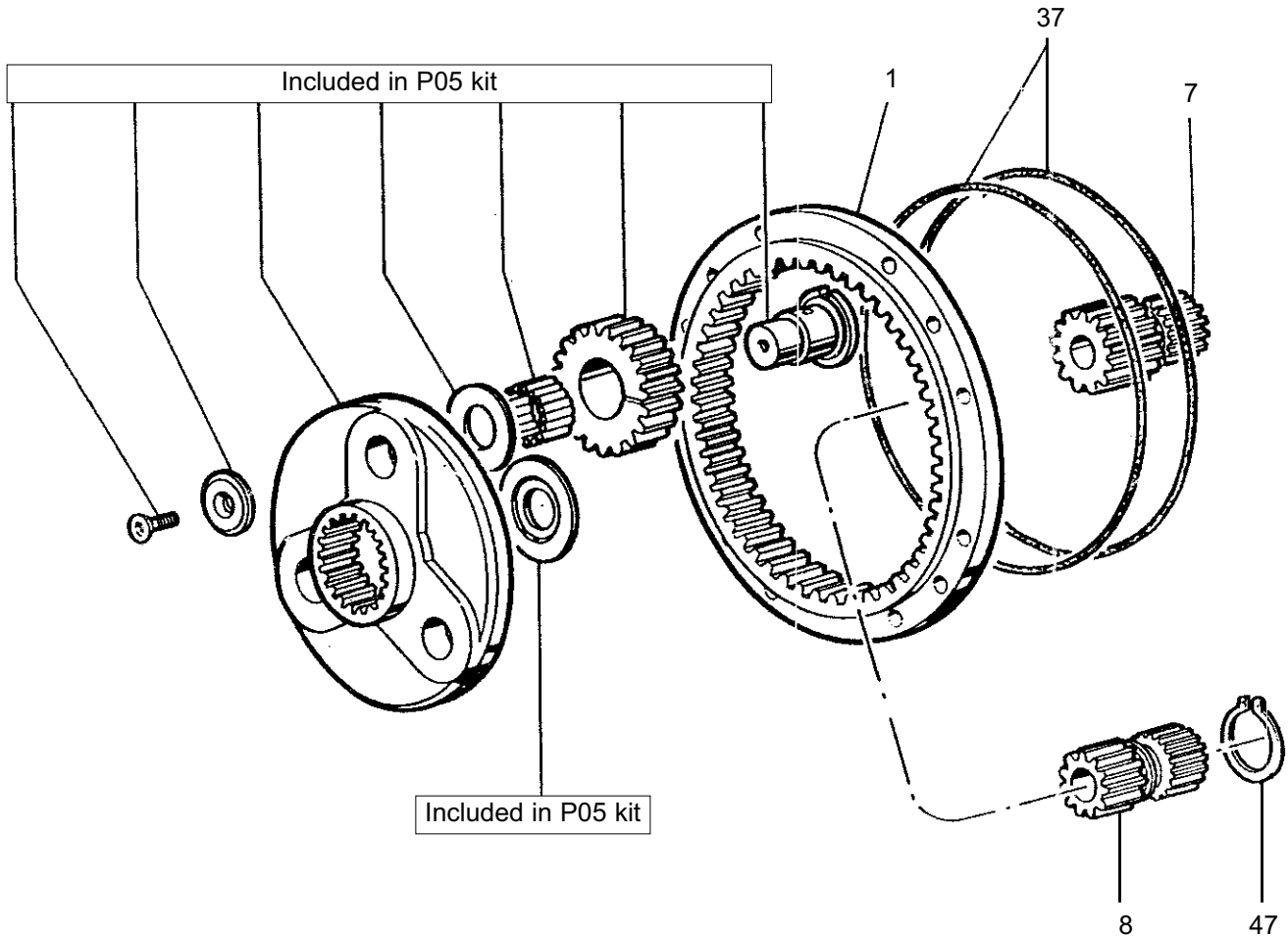


TA2 SERIES

TA2 GEAR REDUCER SECTION AD Part No. 00-4045

item	description	part no.	qty.
1	RING-GEAR	32001021100	1
7	SUN PINION	32730430300	1
8	SUN PINION	32730530300	1
37	O-RING	41220900000	2
47	CIRCLIP	43104000000	1
P05	REDUCTION STAGE KIT - 6 RATIO	211B8270000	1

TA2 Series Gear Reducer Section AD

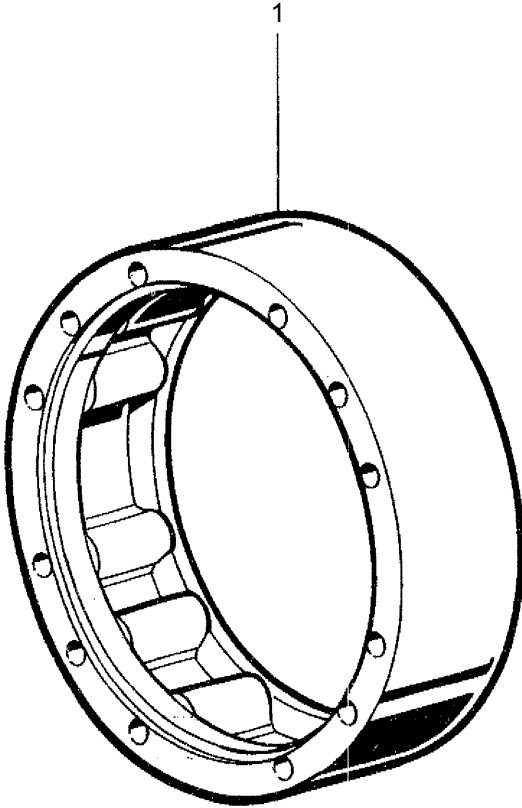


TA2 SERIES

TA2 GEAR REDUCER SECTION AE
Part No. 00-3004

item	description	part no.	qty.
1	INTERMEDIATE FLANGE	34200524000	1

TA2 Series Gear Reducer Section AE

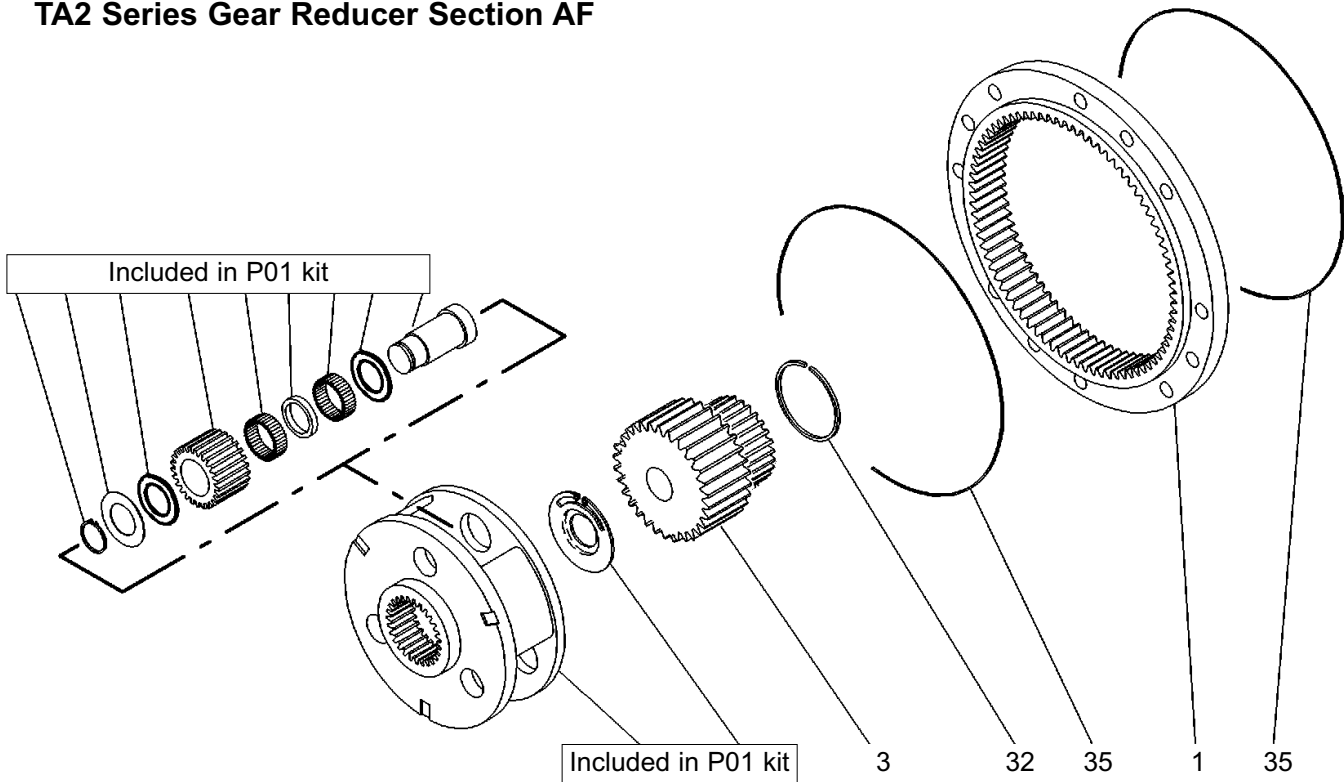


TA2 SERIES

TA2 GEAR REDUCER SECTION AF Part No. 00-4070

item	description	part no.	qty.
1	RING-GEAR	32001421100	1
3	SUN PINION	32729130300	1
32	DISK	43303900000	1
35	O-RING	41220900000	2
P01	REDUCTION STAGE KIT – 3.5 RATIO	211C422000N	1

TA2 Series Gear Reducer Section AF



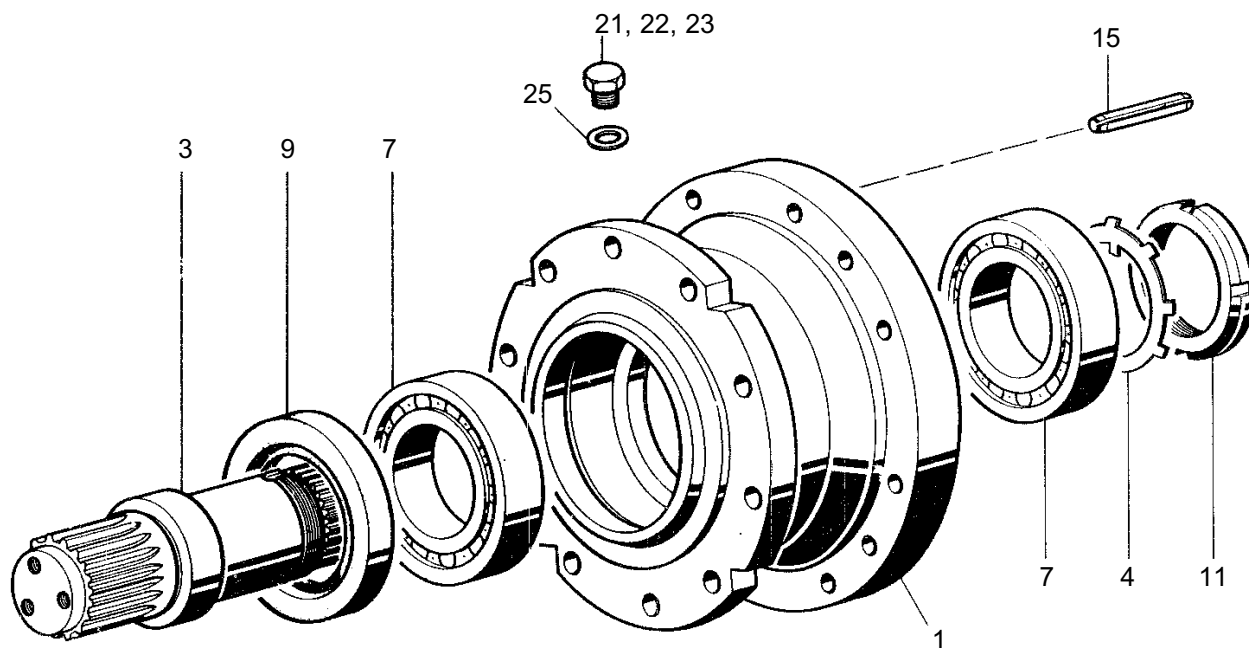
TA2 SERIES

TA2 GEAR REDUCER SECTION AG

Part No. 00-1067

item	description	part no.	qty.
1	SUPPORT	35216214000	1
3	SHAFT	31107621000	1
4	WASHER	37211246400	1
7	BEARING	42210300000	2
9	OIL SEAL	41130400000	1
11	LOCK NUT	47101300000	1
15	SPRING PIN	43839640100	4
21	PLUG	45106400000	1
22	PLUG	45110400000	1
23	PLUG	45120400000	1
25	WASHER	41700300100	3

TA2 Series Gear Reducer Section AG

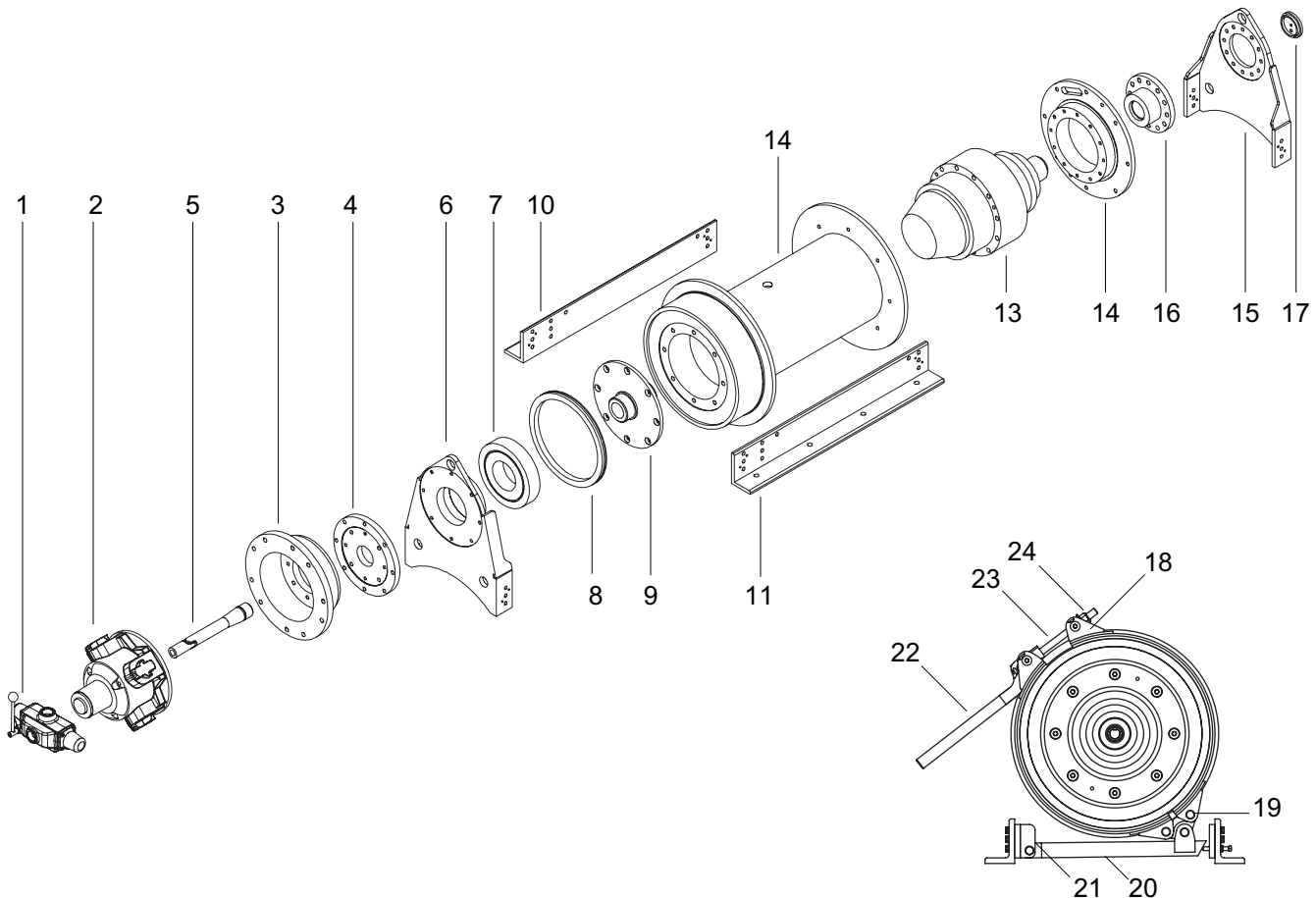


TA2.5 SERIES

TA2.5 ASSEMBLY

item	description	part no.	qty.
1	CONTROL VALVE	B4676	1
2	PISTON AIR MOTOR	C3989	1
3	MOTOR ADAPTER	C3962	1
4	ADAPTER PLATE	B4397	1
5	INPUT SHAFT ASSEMBLY	B4723	1
6	MOTOR END PLATE	D2679	1
7	SEAL OIL CR VR2 TYPE	A8298	1
8	BEARING RADIAL BALL 3.5433 X 6.2992 X 1.1811	A8299	1
9	DRUM SHAFT	B4399	1
10	REAR ANGLE		
10a	REAR ANGLE - 16 INCH DRUM	C4081	1
10b	REAR ANGLE - 24 INCH DRUM	C3979	1
11	FRONT ANGLE		
11a	FRONT ANGLE - 16 INCH DRUM	C4082	1
11b	FRONT ANGLE - 24 INCH DRUM	C3980	1
12	DRUM		
12a	DRUM - 16 INCH DIA.	D2768	1
12b	DRUM - 24 INCH DIA.	D2686	1
13	REDUCER	C3982	1
14	REDUCER MOUNT	C3988	1
15	REDUCER SHAFT HOLDER	B4412	1
16	REDUCER END PLATE	D2687	1
17	SHAFT END CAP	A8389	1
18	BAND BRAKE HALF	C3972	2
19	CLEVIS PINS	A8378	2
20	BRAKE ANCHOR BAR	B4408	1
21	ANCHOR MOUNT	B4405	1
22	BRAKE HANDLE	B4407	1
23	BRAKE TOP LINK	B4404	1
24	BRAKE TENSIONING NUT	B4303	1

TA2.5 Series Assembly



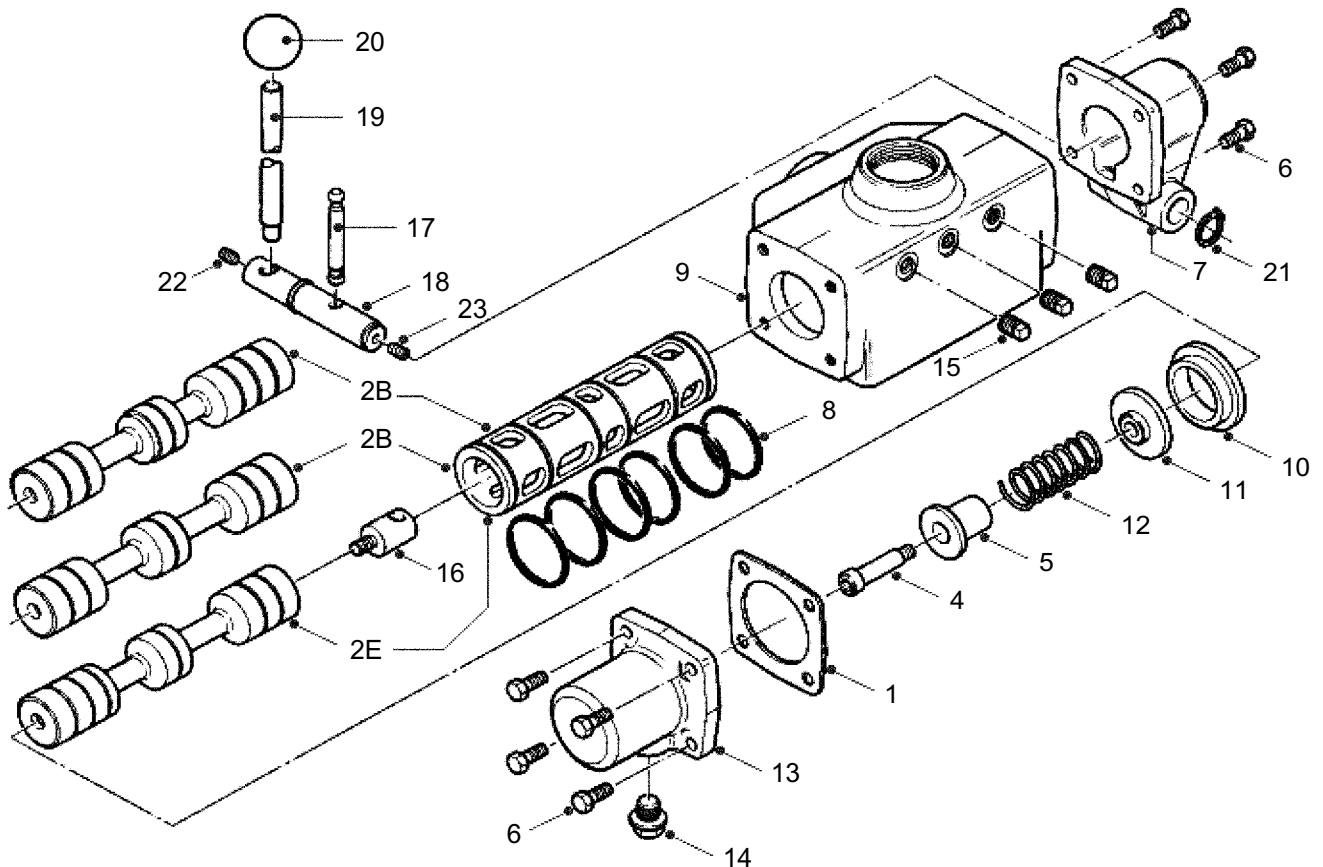
TA2.5 SERIES

CONTROL VALVE Part No. B4676

item	description	part no.	qty.
1	END CAP GASKET	521-066	2
2E	MATCHED SPOOL AND SLEEVE	521-913	1
2B	MATCHED SPOOL AND SLEEVE	521-914	1
4	SHOULDER SCREW 10 MM	817-002	1
5	CENTERING SHAFT GUIDE	521-071	1
6	SET SCREW M8 X 25	802-033	8
7	LEVER CAP	523-041	1
8	O RING 2X 2-1/8	808-013	6
9	VALVE BODY	521-060	1
10	VALVE SLEEVE SPACER	521-068	1
11	WASHER, SPRING CENTERING	521-072	1
12	SPRING FLEXO 403824	814-020	1
13	END CAP -SPRING END	521-064	1
14	VENT PLUG	113-050	1
15	PLUG 1/4 BSPT SQ. HEAD	816-061	3
16	TOGGLE SHAFT	523-024	1
17	TOGGLE PIN	523-026	1
18	HAND LEVER PIVOT	523-008	1
19	HAND LEVER	313-002	1
20	BLACK PLASTIC KNOB 1-1/2	818-002	1
21	CIRCLIP 20MM EXTERNAL	804-013	2
22	GRUB SCREW M8 X 10	815-010	1
23	GRUB SCEW M8 X 16	815-002	1

¹ Old-style handle. Most products are shipped with the one piece new-style handle. Order part no. B4558 for handle and part no. A8282 for handle setscrew.

TA2.5 Series Control Valve

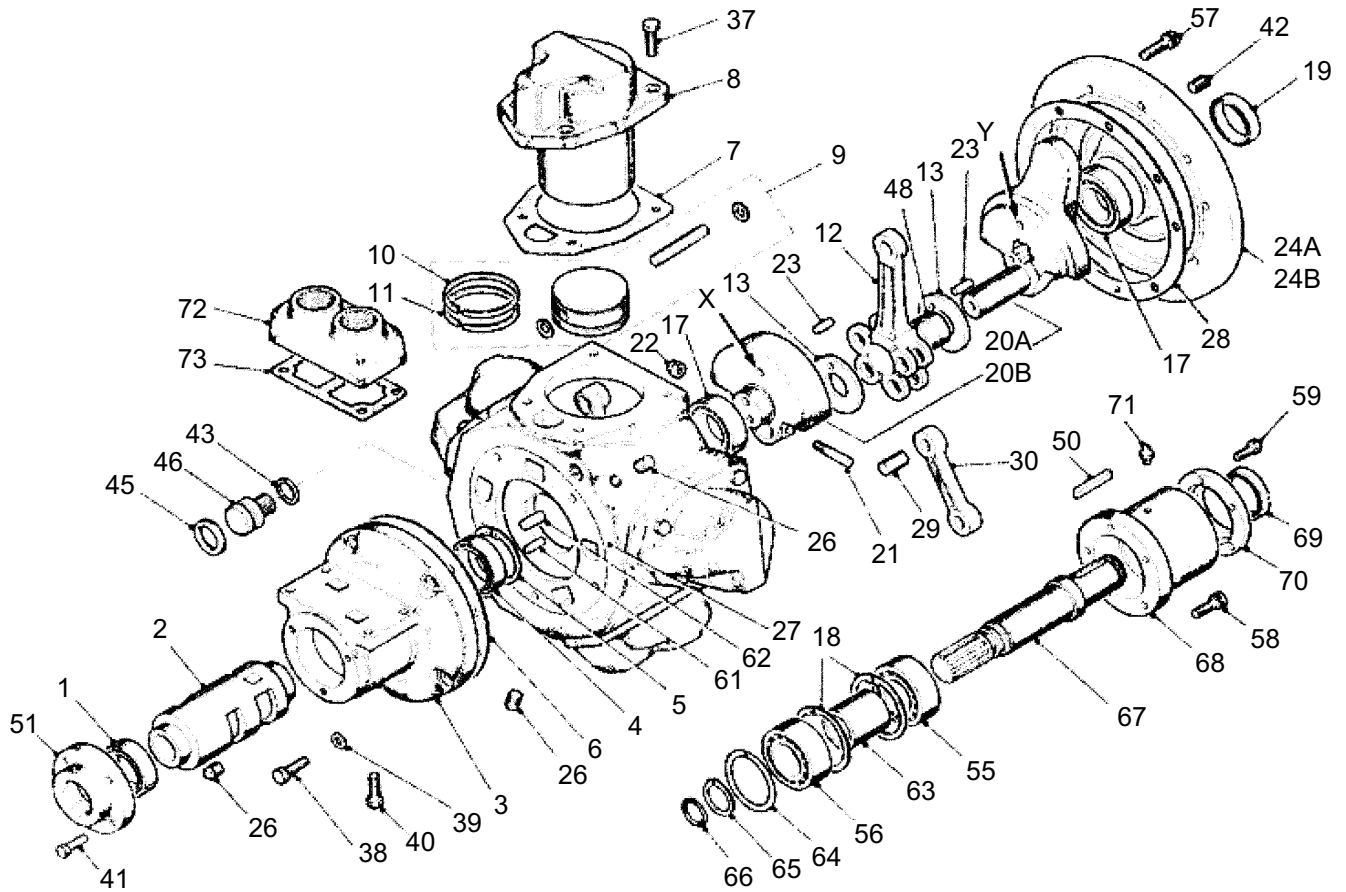


TA2.5 SERIES

TA2.5 PISTON AIR MOTOR Part No. C3989

item	description	part no.	qty.	kit no.
1	ROTARY VALVE BEARING (OUTER)	807-006	1	
2	ROTARY VALVE	520-006	1	
3	ROTARY VALVE HOUSING	520-011	1	
4	ROTARY VALVE BEARING (INNER)	807-005	1	
5	ROTARY VALVE BEARING CIRCLIP	804-066	1	
6	ROTARY VALVE HOUSING GASKET	-	1	529-911
7	CYLINDER GASKET	-	5	529-911
8	CYLINDER	510-082	5	
9	PISTON ASSEMBLY	520-902A	5	
10	COMPRESSION RING	-	5	529-911
11	OIL CONTROL RING	-	5	529-911
12	KING ROD	520-077	1	
13	CRANKSHAFT SPACER	520-052	2	
17	CRANKSHAFT BEARING	807-062	2	
18	CRANKSHAFT BEARING CIRCLIP	804-068	2	
19	CRANKSHAFT OILSEAL	-	1	529-911
20	STD CRANKSHAFT ASSEMBLY	520-901	1	
21	CRANK BOLT	510-088	1	
22	CRANK NUT	801-009	1	
23	SPRING DOWEL	806-013	2	
24	STD FLANGE PLATE	520-076	1	
26	PLUG	816-071	3	
27	ENGINE CASE	520-012	1	
28	ENGINE CASE GASKET	-	1	529-911
29	QUEEN ROD PIVOT	520-081	4	
30	QUEEN ROD	520-078	4	
37	CYLINDER BOLTS	802-074	20	
38	VALVE HOUSING BOLTS	802-073	5	
39	WASHER (FOR ITEM 38)	803-015	5	
40	ADAPTOR PLATE BOLT	802-054	4	
41	EXHAUST COVER BOLTS	802-033	4	
42	FLANGE PLATE PLUGS	815-008	5	
45	SEAL (TRANSIT ONLY)	808-004	1	
46	BREATHER PLUG	130-066	1	
48	NEEDLE BEARING	807-047	1	
50	KEY	811-030	1	
51	ROTARY VALVE EXHAUST COVER	520-005	1	
55	OUTPUT SHAFT BRG (OUTER)	807-063	1	
56	OUTPUT SHAFT BRG (INNER)	807-012	1	
57	FLANGE PLATE CAP SCREWS	809-001	10	
58	OUTPUT HOUSING BOLTS	809-002	5	
59	OUTPUT HOUSING COVER BOLTS	802-016	5	
61	DRIVE PIN (DIA 10MM)	806-001	1	
62	DRIVE PIN (DIA 12MM)	806-002	1	
63	OUTPUT SHAFT BEARING SPACER	518-001	1	
64	OUTPUT SHAFT SPRING RING	518-004	1	
65	OUTPUT SHAFT CIRCLIP	804-017	1	
66	OUTPUT SHAFT SEAL	-	1	529-911
67	OUTPUT SHAFT	518-003	1	
68	OUTPUT SHAFT HOUSING	518-005	1	
69	OUTPUT SHAFT OILSEAL	808-042	1	
70	OUTPUT SHAFT HOUSING COVER	518-002	1	
71	OUTPUT SHAFT GREASE NIPPLE	816-015	1	
72	INLET ADAPTOR PLATE	520-003	1	
73	INLET ADAPTOR PLATE GASKET RM510 SEAL KIT	- 529-911	1	529-911

TA2.5 Series Motor Assembly

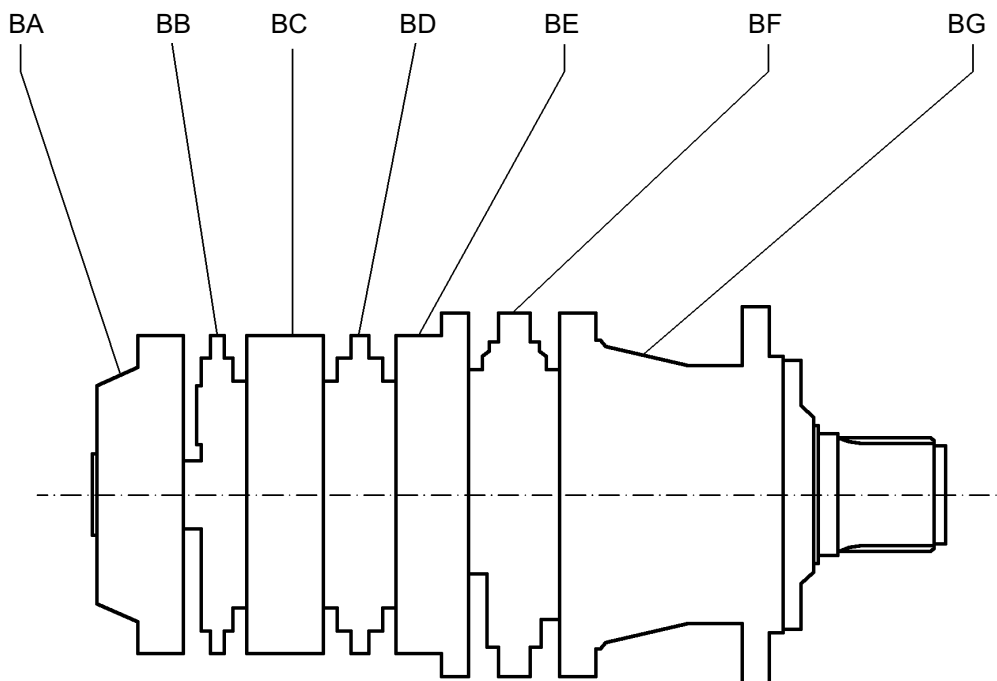


TA2.5 SERIES

TA2.5 PLANENTARY GEAR REDUCER ASSEMBLY

item	description	part no.	qty.
BA	GEAR REDUCER SECTION	00-3110	1
BB	GEAR REDUCER SECTION	00-4043	1
BC	GEAR REDUCER SECTION	00-3004	1
BD	GEAR REDUCER SECTION	00-4070	1
BE	GEAR REDUCER SECTION	02-3009	1
BF	GEAR REDUCER SECTION	00-4108	1
BG	GEAR REDUCER SECTION	00-1100	1

TA2.5 Series Gear Reducer Assembly

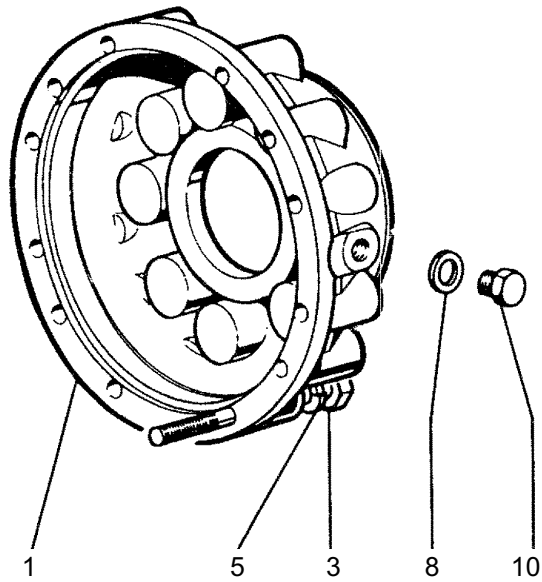


TA2.5 SERIES

TA2 GEAR REDUCER SECTION BA Part No. 00-3110

item	description	part no.	qty.
1	INPUT FLANGE	34601314000	1
3	SCREW	46111900000	8
5	WASHER	46701100101	8
8	WASHER	41700300100	3
10	PLUG	45104400000	3

TA2.5 Series Gear Reducer Section BA

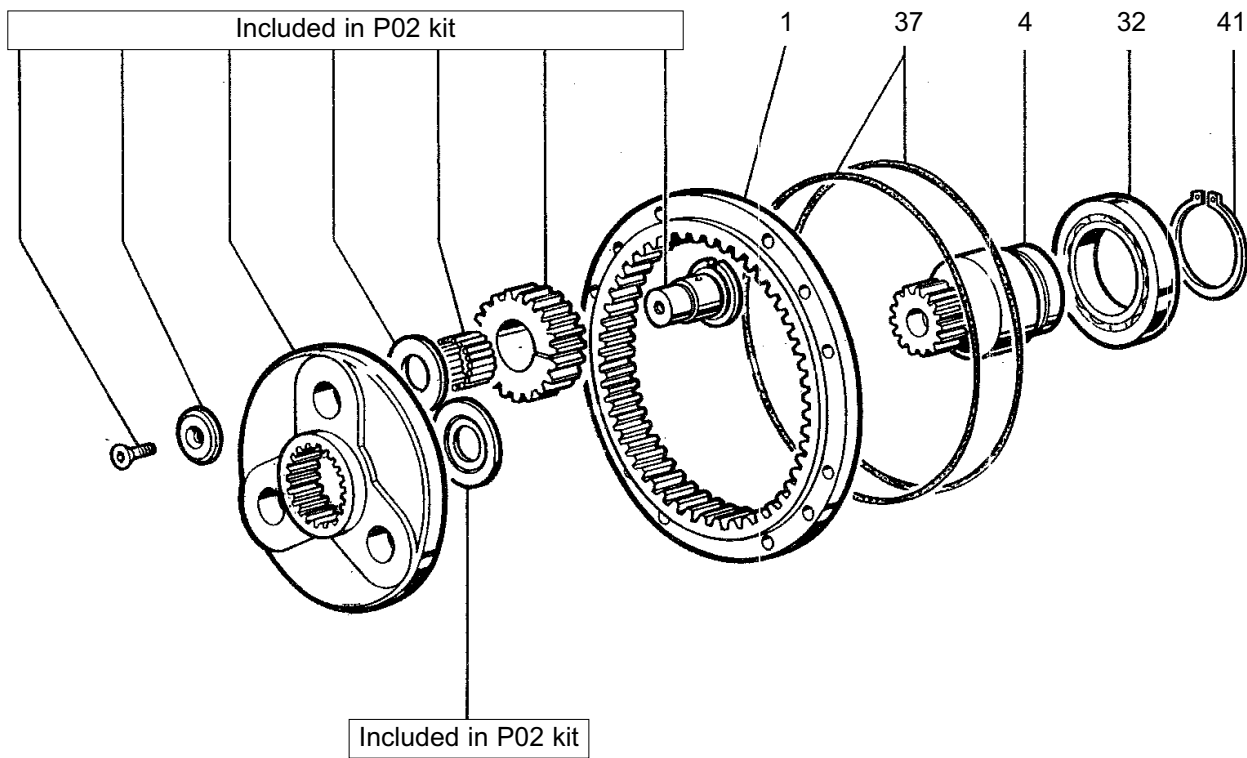


TA2.5 SERIES

TA2 GEAR REDUCER SECTION BB Part No. 00-4043

item	description	part no.	qty.
P02	SUBASSEMBLY – 3.5 RATIO	211B8220000	1
1	RING-GEAR	32001021100	1
4	PINION	3262822000K	1
32	BEARING	42119300000	1
37	O-RING	41220900000	2
41	CIRCLIP	43106300000	1

TA2.5 Series Gear Reducer Section BB

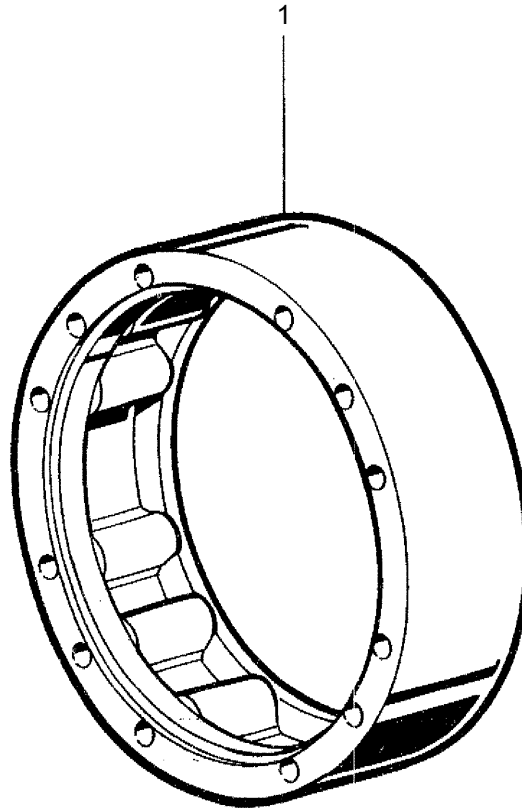


TA2.5 SERIES

TA2 GEAR REDUCER SECTION BC
Part No. 00-3004

item	description	part no.	qty.
1	INTERMEDIATE FLANGE	34200524000	1

TA2.5 Series Gear Reducer Section BC

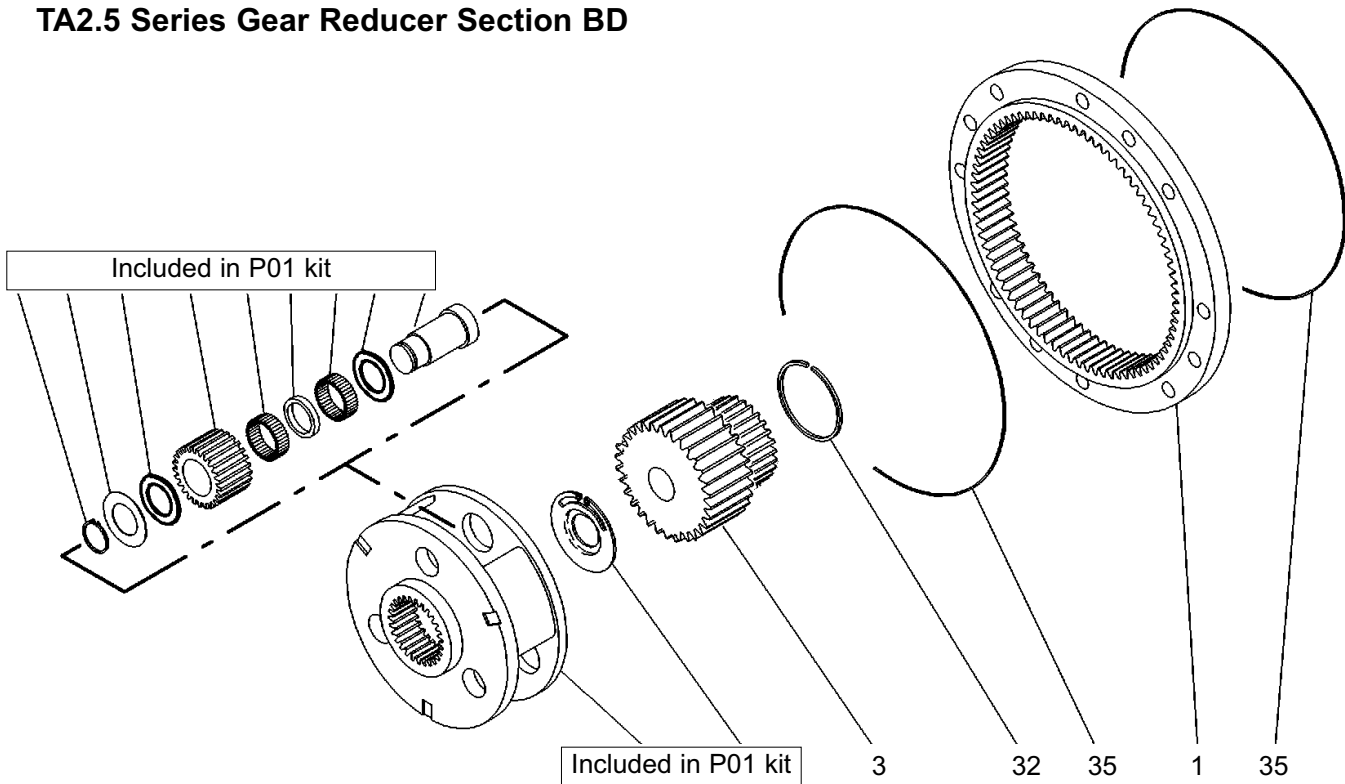


TA2.5 SERIES

TA2 GEAR REDUCER SECTION BD Part No. 00-4070

item	description	part no.	qty.
1	RING-GEAR	32001421100	1
3	SUN PINION	32729130300	1
32	DISK	43303900000	1
35	O-RING	41220900000	2
P01	REDUCTION STAGE KIT – 3.5 RATIO	211C422000N	1

TA2.5 Series Gear Reducer Section BD



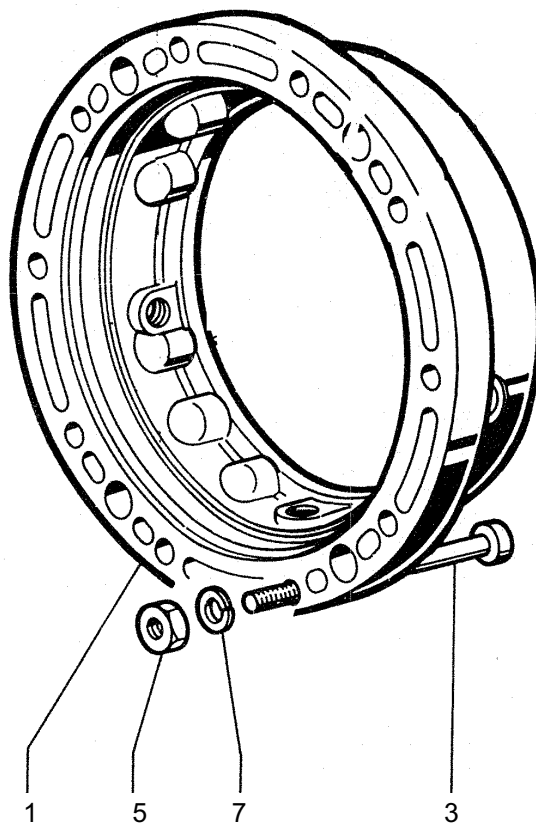
TA2.5 SERIES

TA2 GEAR REDUCER SECTION BE

Part No. 02-3009

item	description	part no.	qty.
1	INTERMED.FLANGE	34219324000	1
3	SCREW	46214800000	10
5	NUT	46600900100	10
7	WASHER	46701200101	10

TA2.5 Series Gear Reducer Section BE

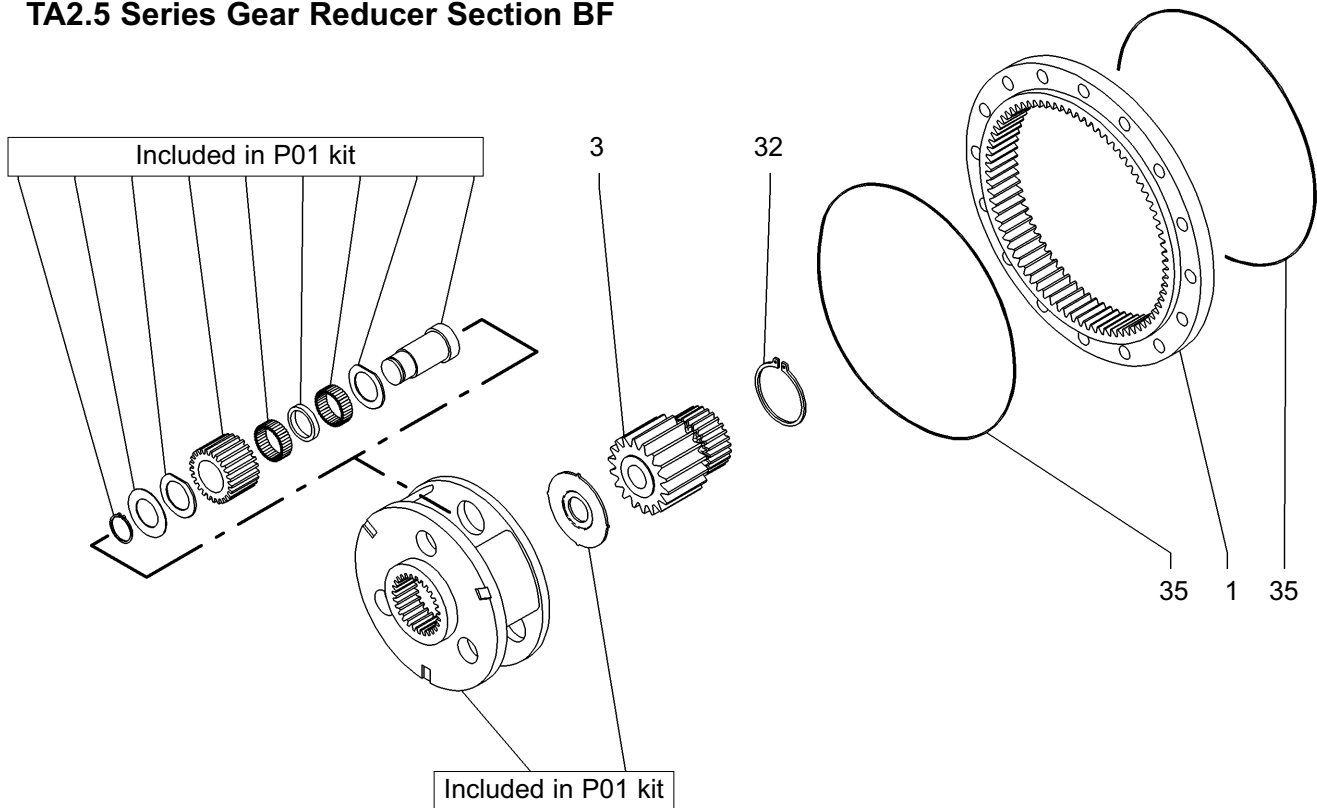


TA2.5 SERIES

TA2 GEAR REDUCER SECTION BF Part No. 00-4108

item	description	part no.	qty.
P01	SUBASSEMBLY – 3.5 RATIO	211D622000N	1
1	RING-GEAR	32001921100	1
3	SUN PINION	32733230300	1
32	CIRCLIP	43106100000	1
35	O-RING	41221700000	2

TA2.5 Series Gear Reducer Section BF

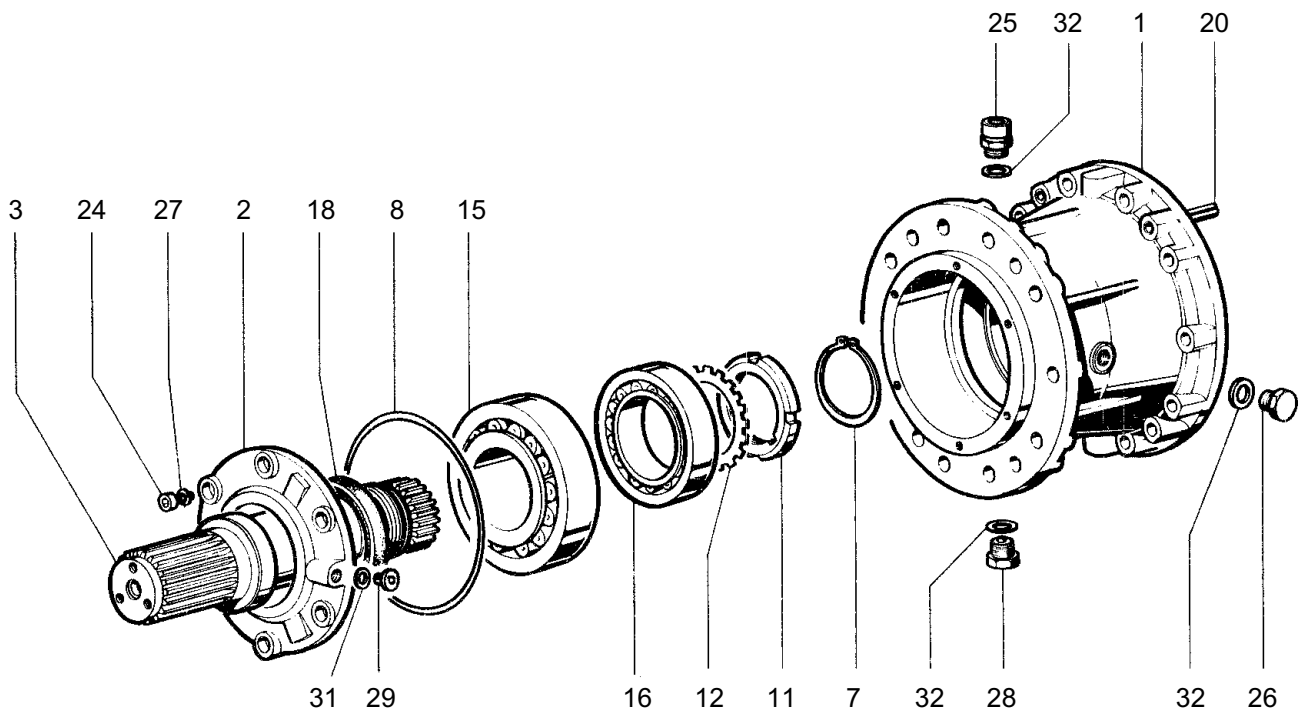


TA2.5 SERIES

TA2 GEAR REDUCER SECTION BG Part No. 00-1100

item	description	part no.	qty.
1	SUPPORT	35206614200	1
2	COVER	35417424000	1
3	SHAFT	31113730600	1
7	CIRCLIP	43107000000	1
8	O-RING	41234100000	1
11	LOCK NUT	47101600000	1
12	WASHER	37211346400	1
15	BEARING	42214100000	1
16	BEARING	42213900000	1
18	OIL SEAL	41133500000	1
20	PIN	43843040100	4
24	SCREW	46107800000	6
25	PLUG	45106400000	1
26	OIL LEVEL PLUG	45110400000	1
27	WASHER	46701000101	6
28	PLUG	45120400000	1
29	PLUG	45102200000	1
31	WASHER	41700100100	1
32	WASHER	41700300100	3

TA2.5 Series Gear Reducer Section BG

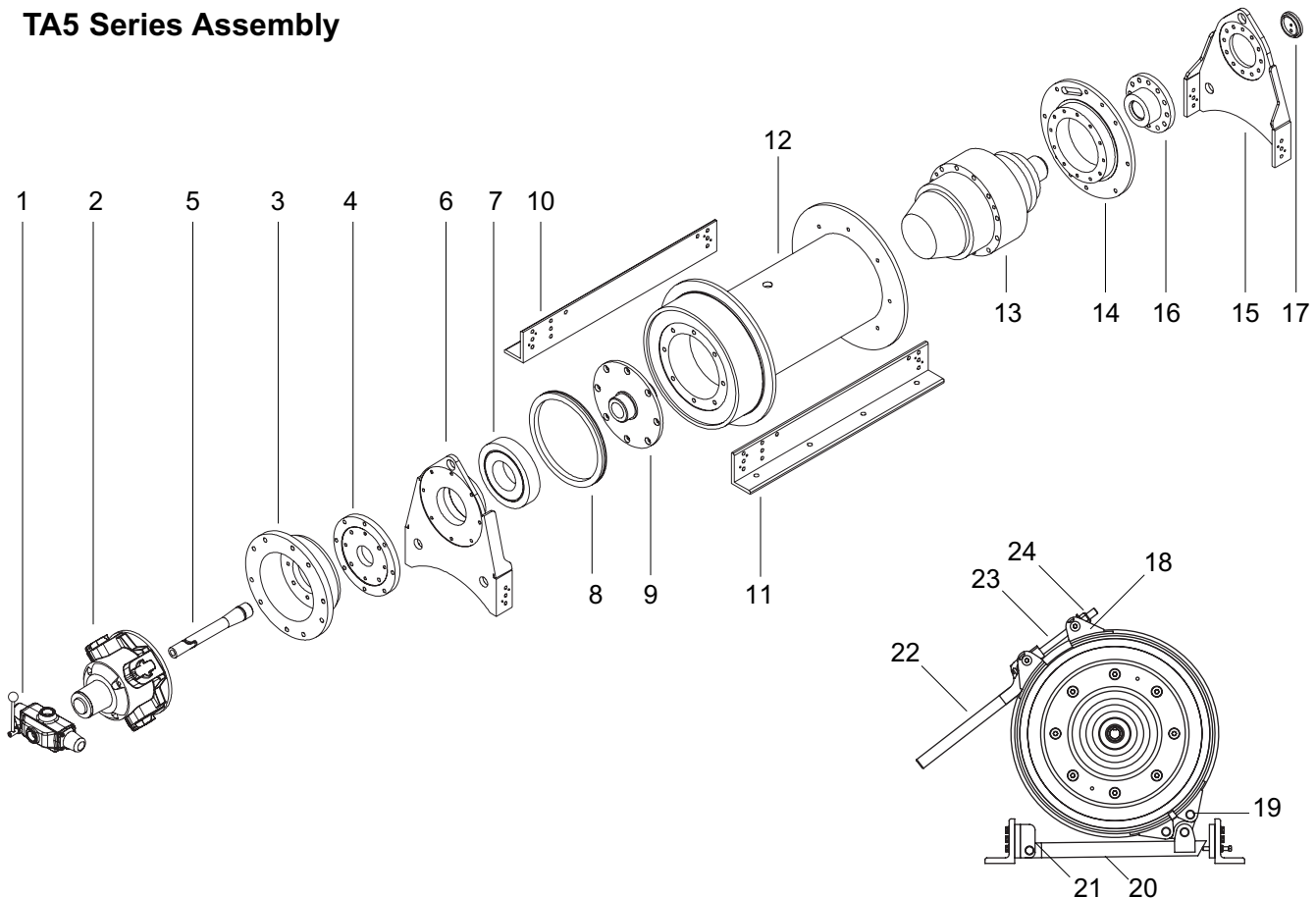


TA5 SERIES

TA5 ASSEMBLY

item	description	part no.	qty.
1	CONTROL VALVE	B4676	1
2	PISTON AIR MOTOR	C3989	1
3	MOTOR ADAPTER	C3962	1
4	ADAPTER PLATE	B4444	1
5	INPUT SHAFT ASSEMBLY	B4716	1
6	MOTOR END PLATE	D2694	1
7	SEAL OIL CR VR2 TYPE	A8470	1
8	BEARING RADIAL BALL 3.5433 X 6.2992 X 1.1811	A8474	1
9	DRUM SHAFT	C3992	1
10	REAR ANGLE		
10a	REAR ANGLE - 16 INCH DRUM	D2835	
10b	REAR ANGLE - 24 INCH DRUM	D2827	1
10c	REAR ANGLE - 30 INCH DRUM	D2712	1
11	FRONT ANGLE		
11a	FRONT ANGLE - 16 INCH DRUM	D2844	
11b	FRONT ANGLE - 24 INCH DRUM	D2828	1
11c	FRONT ANGLE - 30 INCH DRUM	D2713	1
12	DRUM		
12a	DRUM - 16 INCH DIA.	D2840	1
12b	DRUM - 24 INCH DIA.	D2832	1
12c	DRUM - 30 INCH DIA.	D2695	1
13	REDUCER	C3983	1
14	REDUCER MOUNT	D2692	1
15	REDUCER SHAFT HOLDER	B4415	1
16	REDUCER END PLATE	D2693	1
17	SHAFT END CAP	A8405	1
18	BAND BRAKE HALF	C4013	2
19	CLEVIS PINS	A8456	2
20	BRAKE ANCHOR BAR	B4438	1
21	ANCHOR MOUNT	B4443	1
22	BRAKE HANDLE	C4021	1
23	BRAKE TOP LINK	B4449	1
24	BRAKE TENSIONING NUT	A3515	1

TA5 Series Assembly



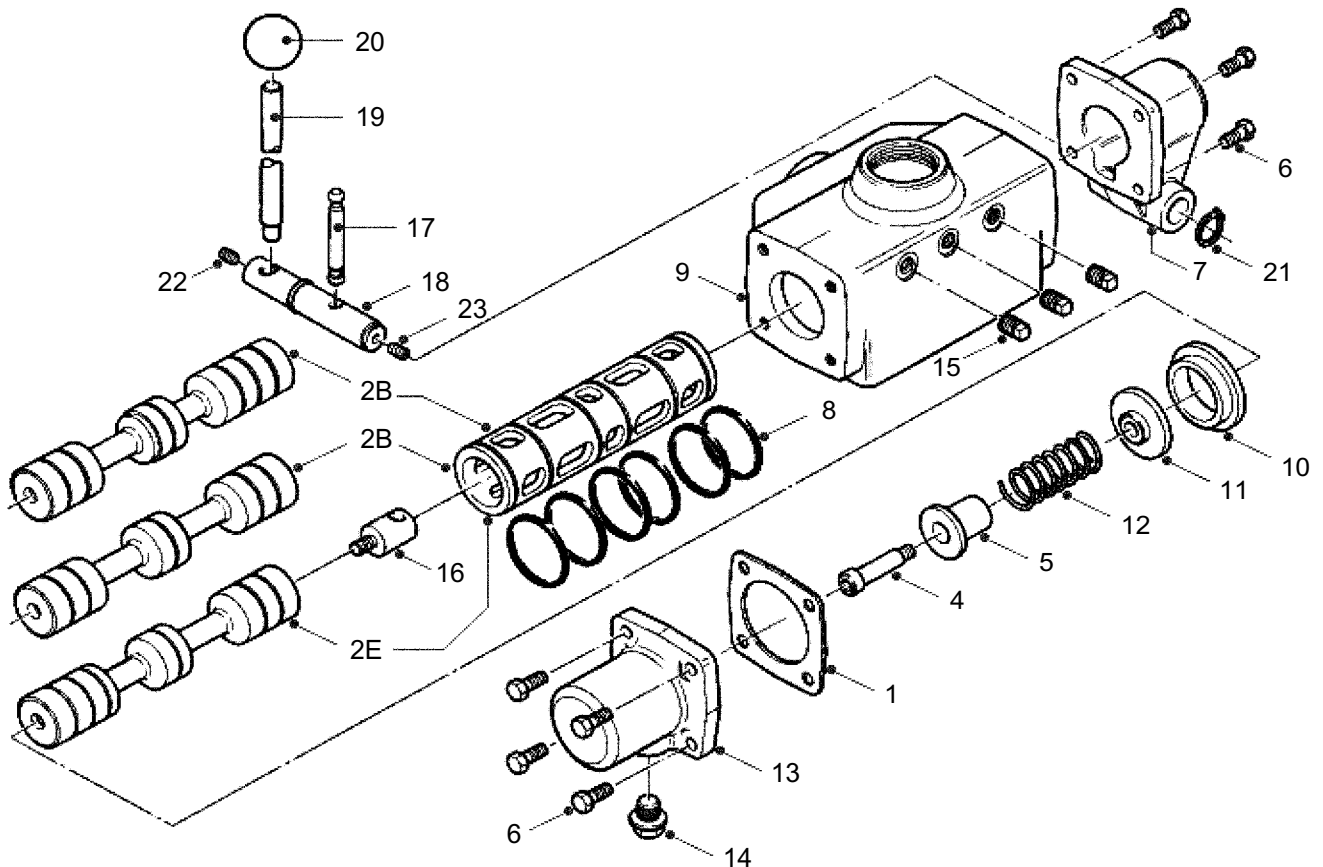
TA5 SERIES

CONTROL VALVE Part No. B4676

item	description	part no.	qty.
1	END CAP GASKET	521-066	2
2E	MATCHED SPOOL AND SLEEVE	521-913	1
2B	MATCHED SPOOL AND SLEEVE	521-914	1
4	SHOULDER SCREW 10 MM	817-002	1
5	CENTERING SHAFT GUIDE	521-071	1
6	SET SCREW M8 X 25	802-033	8
7	LEVER CAP	523-041	1
8	O RING 2X 2-1/8	808-013	6
9	VALVE BODY	521-060	1
10	VALVE SLEEVE SPACER	521-068	1
11	WASHER, SPRING CENTERING	521-072	1
12	SPRING FLEXO 403824	814-020	1
13	END CAP -SPRING END	521-064	1
14	VENT PLUG	113-050	1
15	PLUG 1/4 BSPT SQ. HEAD	816-061	3
16	TOGGLE SHAFT	523-024	1
17	TOGGLE PIN	523-026	1
18	HAND LEVER PIVOT	523-008	1
19	HAND LEVER	313-002	1
20	BLACK PLASTIC KNOB 1-1/2	818-002	1
21	CIRCLIP 20MM EXTERNAL	804-013	2
22	GRUB SCREW M8 X 10	815-010	1
23	GRUB SCREW M8 X 16	815-002	1

¹ Old-style handle. Most products are shipped with the one piece new-style handle. Order part no. B4558 for handle and part no. A8282 for handle setscrew.

TA5 Series Control Valve

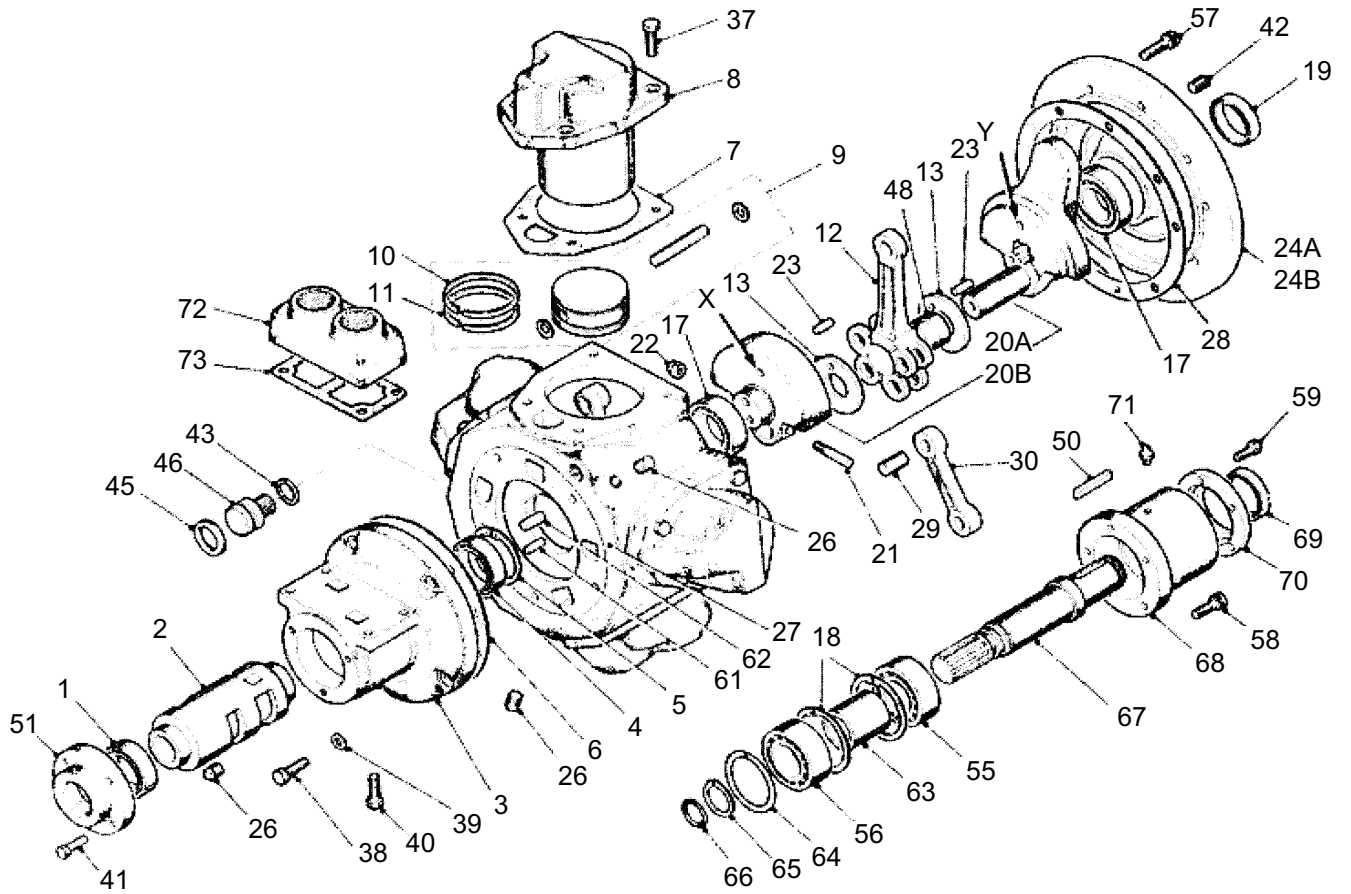


TA5 SERIES

TA5 PISTON AIR MOTOR Part No. C3989

item	description	part no.	qty.	kit no.
1	ROTARY VALVE BEARING (OUTER)	807-006	1	
2	ROTARY VALVE	520-006	1	
3	ROTARY VALVE HOUSING	520-011	1	
4	ROTARY VALVE BEARING (INNER)	807-005	1	
5	ROTARY VALVE BEARING CIRCLIP	804-066	1	
6	ROTARY VALVE HOUSING GASKET	-	1	529-911
7	CYLINDER GASKET	-	5	529-911
8	CYLINDER	510-082	5	
9	PISTON ASSEMBLY	520-902A	5	
10	COMPRESSION RING	-	5	529-911
11	OIL CONTROL RING	-	5	529-911
12	KING ROD	520-077	1	
13	CRANKSHAFT SPACER	520-052	2	
17	CRANKSHAFT BEARING	807-062	2	
18	CRANKSHAFT BEARING CIRCLIP	804-068	2	
19	CRANKSHAFT OILSEAL	-	1	529-911
20	STD CRANKSHAFT ASSEMBLY	520-901	1	
21	CRANK BOLT	510-088	1	
22	CRANK NUT	801-009	1	
23	SPRING DOWEL	806-013	2	
24	STD FLANGE PLATE	520-076	1	
26	PLUG	816-071	3	
27	ENGINE CASE	520-012	1	
28	ENGINE CASE GASKET	-	1	529-911
29	QUEEN ROD PIVOT	520-081	4	
30	QUEEN ROD	520-078	4	
37	CYLINDER BOLTS	802-074	20	
38	VALVE HOUSING BOLTS	802-073	5	
39	WASHER (FOR ITEM 38)	803-015	5	
40	ADAPTOR PLATE BOLT	802-054	4	
41	EXHAUST COVER BOLTS	802-033	4	
42	FLANGE PLATE PLUGS	815-008	5	
45	SEAL (TRANSIT ONLY)	808-004	1	
46	BREATHER PLUG	130-066	1	
48	NEEDLE BEARING	807-047	1	
50	KEY	811-030	1	
51	ROTARY VALVE EXHAUST COVER	520-005	1	
55	OUTPUT SHAFT BRG (OUTER)	807-063	1	
56	OUTPUT SHAFT BRG (INNER)	807-012	1	
57	FLANGE PLATE CAP SCREWS	809-001	10	
58	OUTPUT HOUSING BOLTS	809-002	5	
59	OUTPUT HOUSING COVER BOLTS	802-016	5	
61	DRIVE PIN (DIA 10MM)	806-001	1	
62	DRIVE PIN (DIA 12MM)	806-002	1	
63	OUTPUT SHAFT BEARING SPACER	518-001	1	
64	OUTPUT SHAFT SPRING RING	518-004	1	
65	OUTPUT SHAFT CIRCLIP	804-017	1	
66	OUTPUT SHAFT SEAL	-	1	529-911
67	OUTPUT SHAFT	518-003	1	
68	OUTPUT SHAFT HOUSING	518-005	1	
69	OUTPUT SHAFT OILSEAL	808-042	1	
70	OUTPUT SHAFT HOUSING COVER	518-002	1	
71	OUTPUT SHAFT GREASE NIPPLE	816-015	1	
72	INLET ADAPTOR PLATE	520-003	1	
73	INLET ADAPTOR PLATE GASKET	-	1	529-911
	RM510 SEAL KIT	529-911		

TA5 Series Motor Assembly

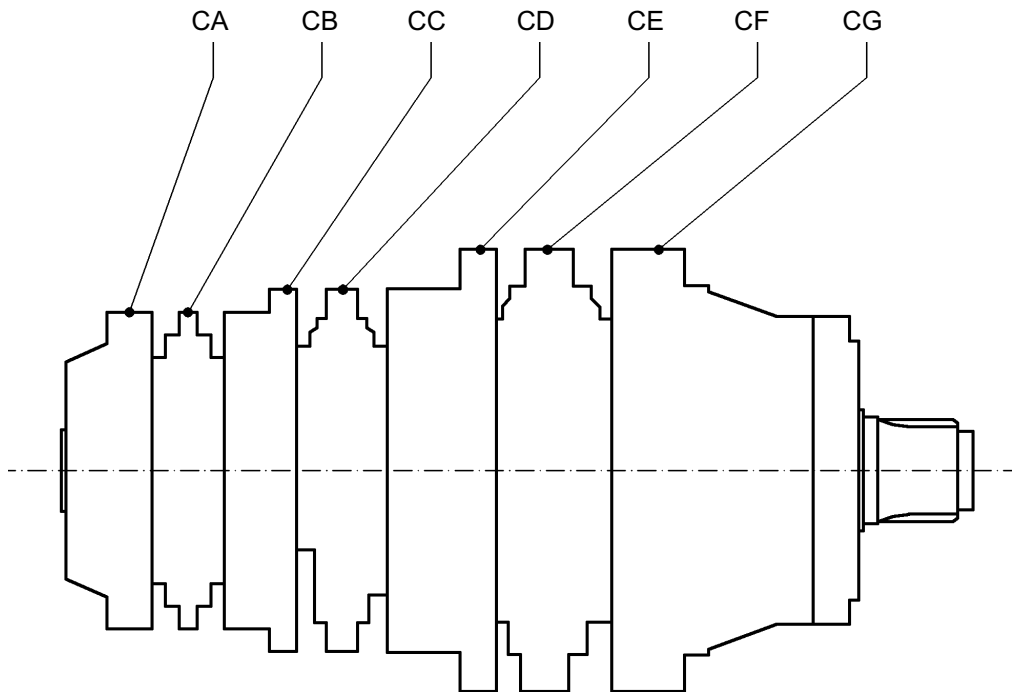


TA5 SERIES

TA5 PLANETARY GEAR REDUCER ASSEMBLY

item	description	part no.	qty.
CA	GEAR REDUCER SECTION	00-3108	1
CB	GEAR REDUCER SECTION	00-4071	1
CC	GEAR REDUCER SECTION	07-3008	1
CD	GEAR REDUCER SECTION	00-4108	1
CE	GEAR REDUCER SECTION	00-3022	1
CF	GEAR REDUCER SECTION	02-4176	1
CG	GEAR REDUCER SECTION	00-1175	1

TA5 Series Gear Reducer Assembly

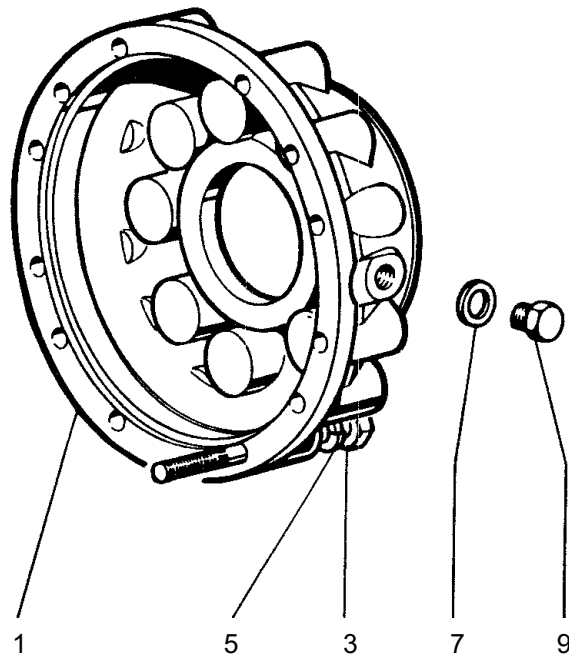


TA5 SERIES

TA5 GEAR REDUCER SECTION CA Part No. 00-3108

item	description	part no.	qty.
1	INPUT FLANGE	34601314000	1
3	SCREW	46111200000	8
5	WASHER	46701100101	8
7	WASHER	41700300100	3
9	PLUG	45104400000	3

TA5 Series Gear Reducer Section CA

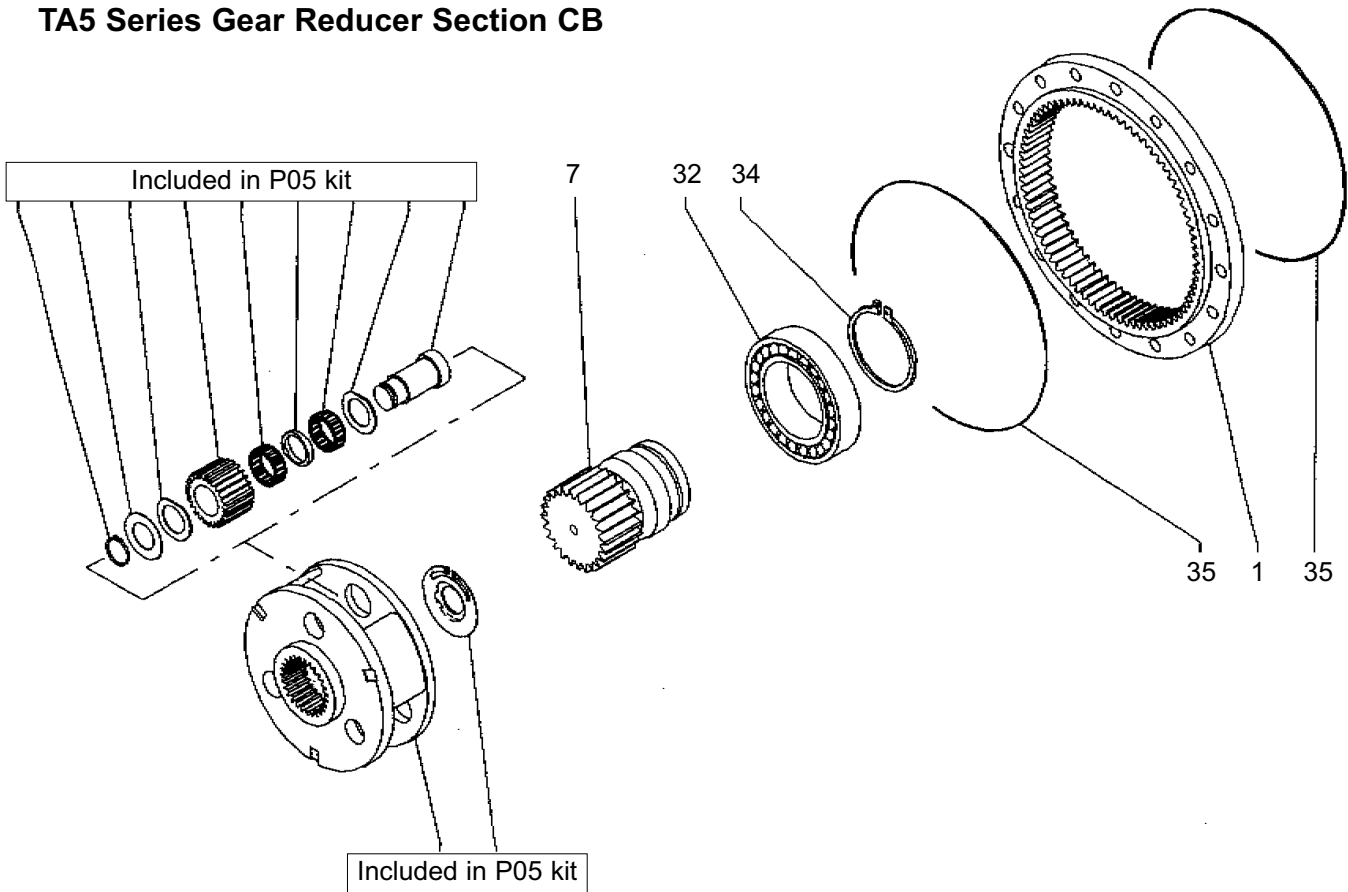


TA5 SERIES

TA5 GEAR REDUCER SECTION CB Part No. 00-4071

item	description	part no.	qty.
P05	SUBASSEMBLY – 7.25 RATIO	211C430000N	1
1	RING-GEAR	32001421100	1
7	PINION	32605931900	1
32	BEARING	42119300000	1
34	CIRCLIP	43106300000	1
35	O-RING	41220900000	2

TA5 Series Gear Reducer Section CB



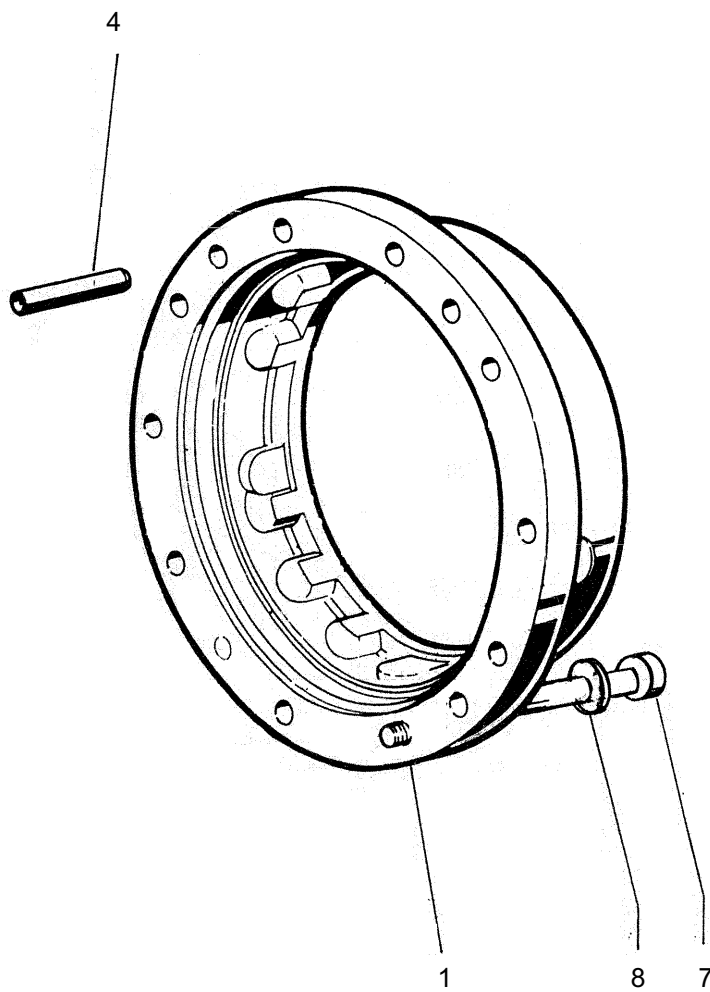
TA5 SERIES

TA5 GEAR REDUCER SECTION CC

Part No. 07-3008

item	description	part no.	qty.
1	INTERMED.FLANGE	34219324000	1
4	SPRING PIN	43843040100	4
7	SCREW	46214300600	10
8	WASHER	46701200101	10

TA5 Series Gear Reducer Section CC

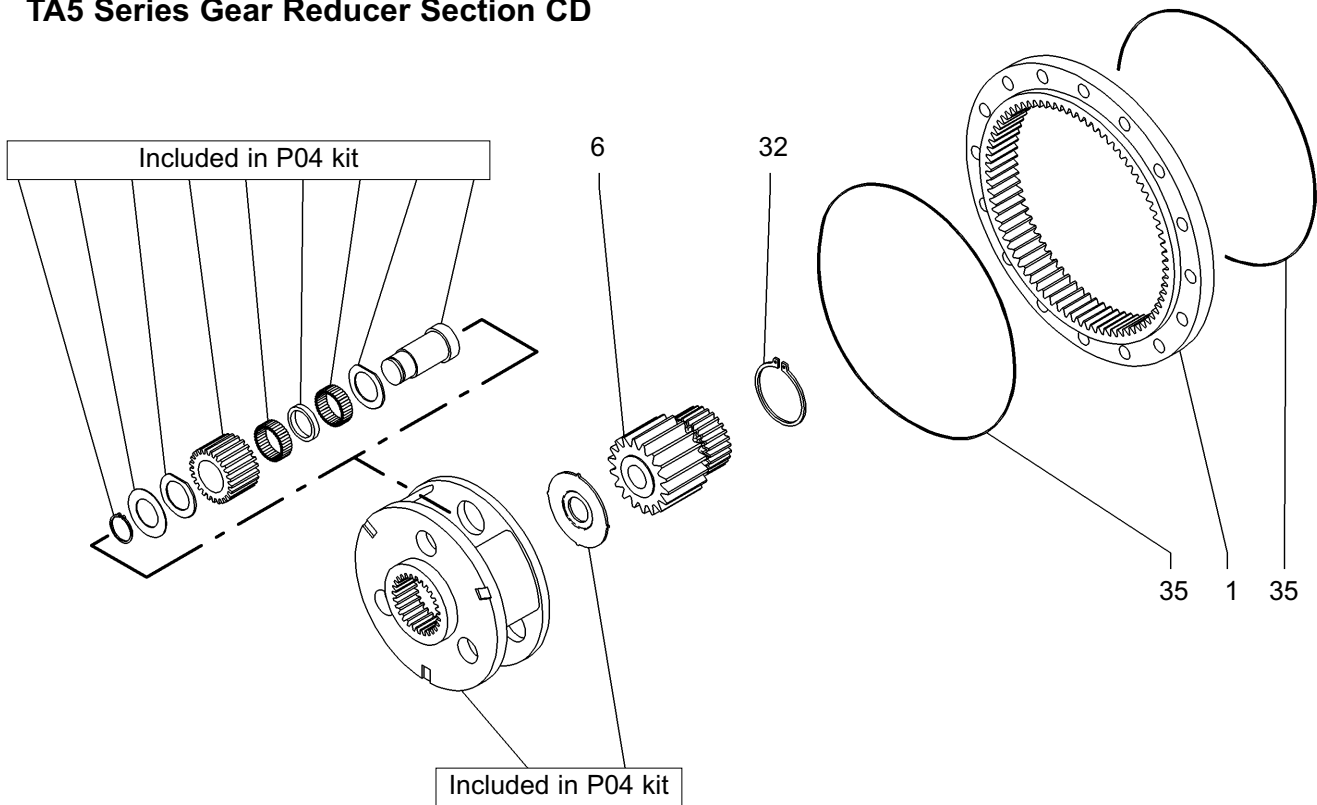


TA5 SERIES

TA5 GEAR REDUCER SECTION CD Part No. 00-4108

item	description	part no.	qty.
P04	SUBASSEMBY – 5 RATIO	211D625000N	1
1	RING-GEAR	32001921100	1
6	SUN PINION	32733530300	1
32	CIRCLIP	43106100000	1
35	O-RING	41221700000	2

TA5 Series Gear Reducer Section CD

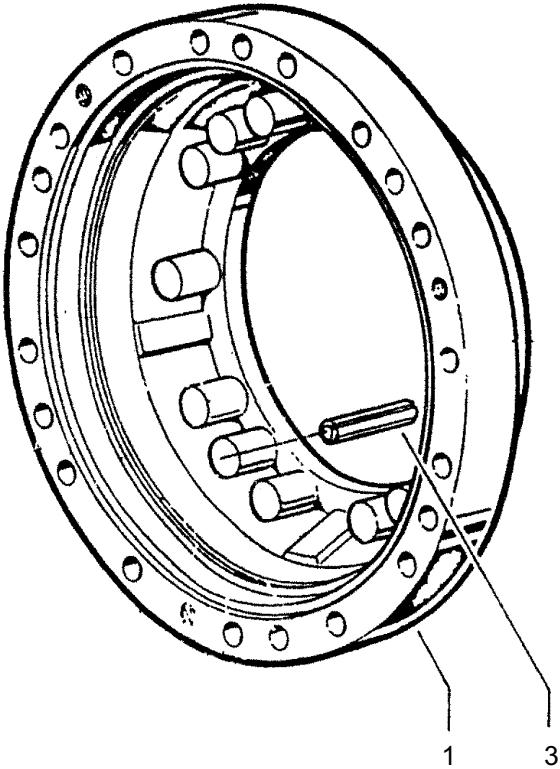


TA5 SERIES

TA5 GEAR REDUCER SECTION CE Part No. 00-3022

item	description	part no.	qty.
1	INTERMED. FLANGE	34210214000	1
3	SPRING PIN	43843040100	4

TA5 Series Gear Reducer Section Ce

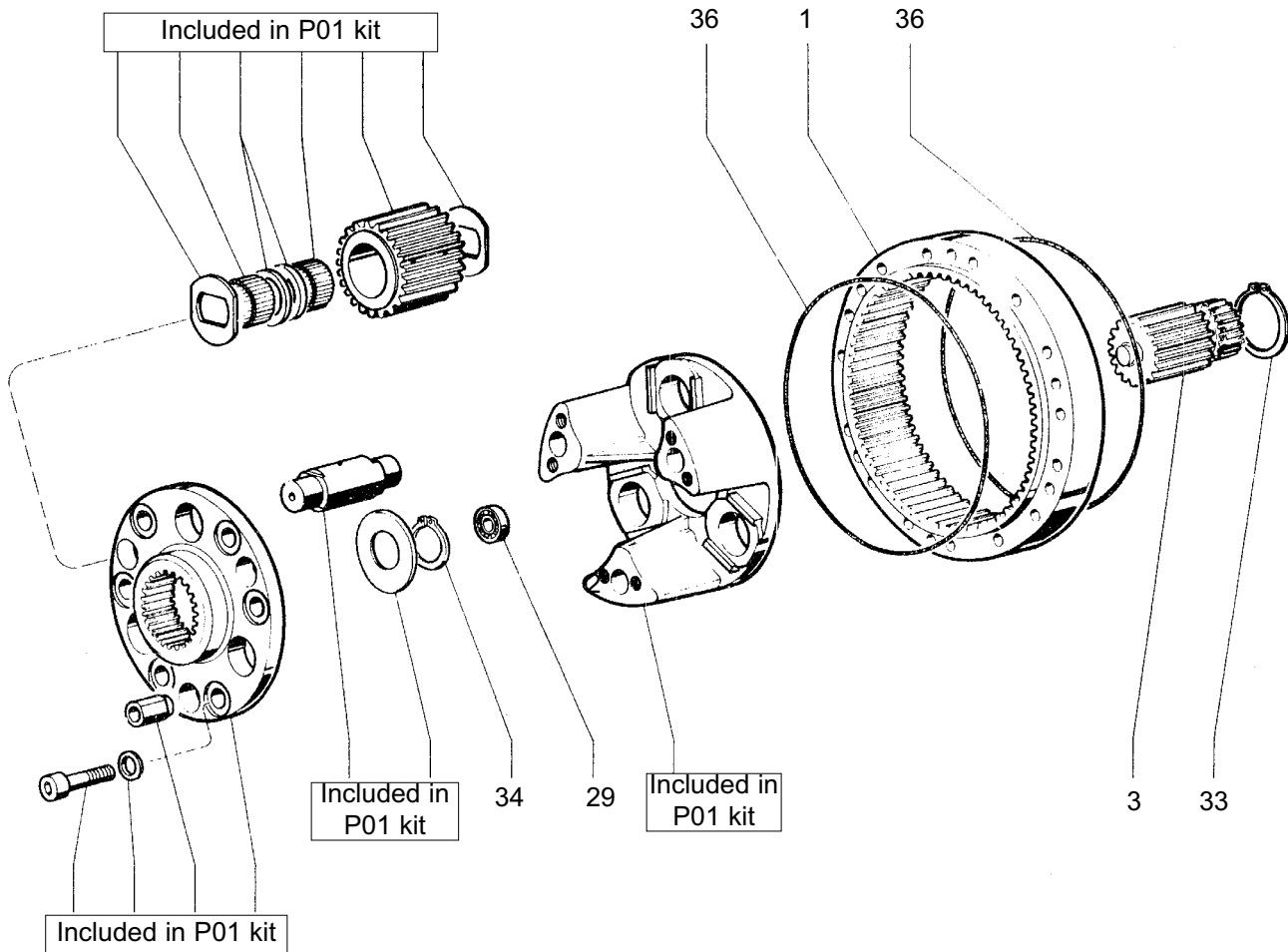


TA5 SERIES

TA5 GEAR REDUCER SECTION CF Part No. 02-4176

item	description	part no.	qty.
P01	SUBASSEMBLY – 3.9 RATIO	211E9230000	1
1	RING-GEAR	32002821100	1
3	SUN PINION	32769630300	1
29	BEARING	42109900000	1
33	CIRCLIP	43107000000	1
34	CIRCLIP	43105600000	1
36	O-RING	41251100000	2

TA5 Series Gear Reducer Section CF



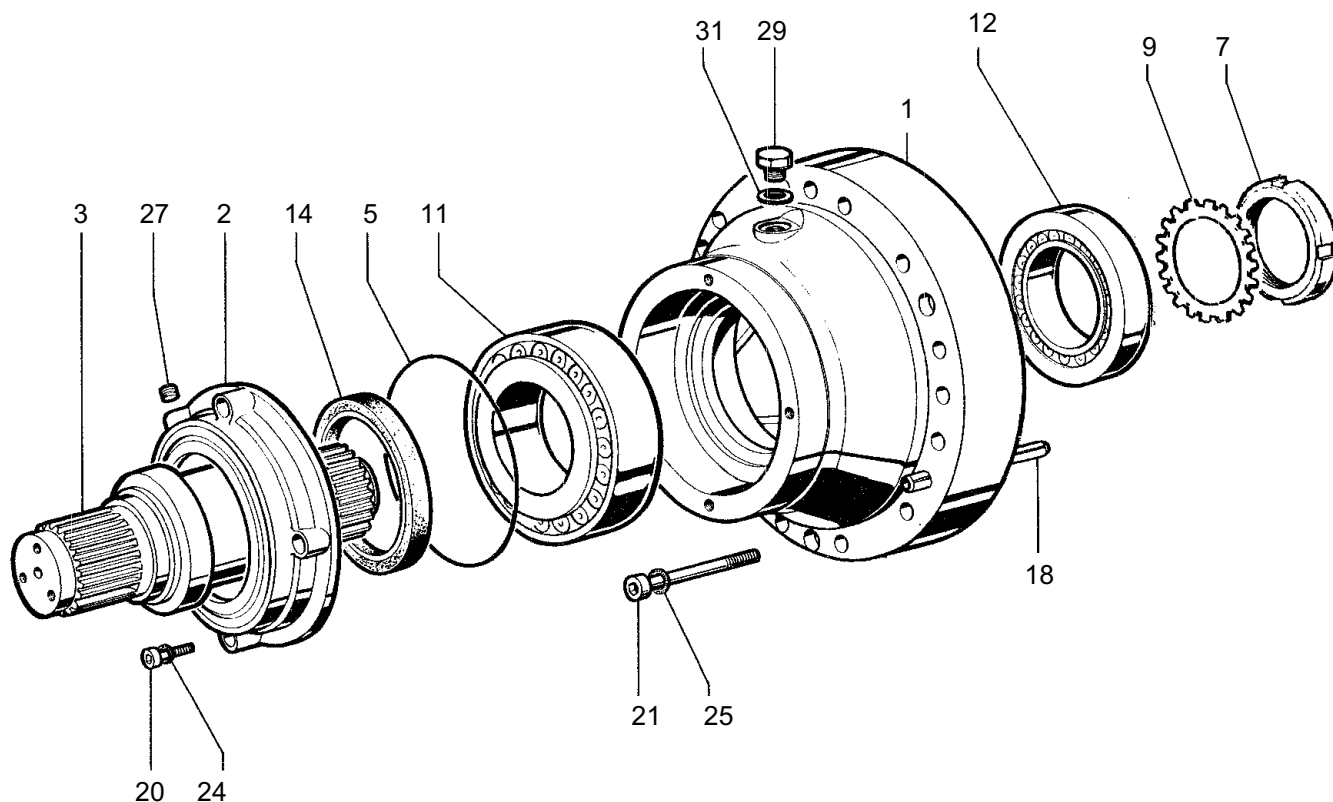
TA5 SERIES

TA5 GEAR REDUCER SECTION CG

Part No. 00-1175

item	description	part no.	qty.
1	SUPPORT	35203104000	1
2	COVER	35402824000	1
3	SHAFT	31120520500	1
5	O-RING	41220700000	1
7	LOCK NUT	36537600000	1
9	SHAFT COVER	37211646400	1
11	BEARING	42219800000	1
12	BEARING	42216400000	1
14	OIL SEAL	41137500000	1
18	CYLINDRICAL PIN	43843040100	6
20	SCREW	46210500000	4
21	SCREW	46214900000	3
24	WASHER	46903600000	4
25	WASHER	46903700000	3
27	PLUG	45100300000	1
29	PLUG	45104400000	1
31	SHAFT COVER	41700300100	1

TA5 Series Gear Reducer Section CG

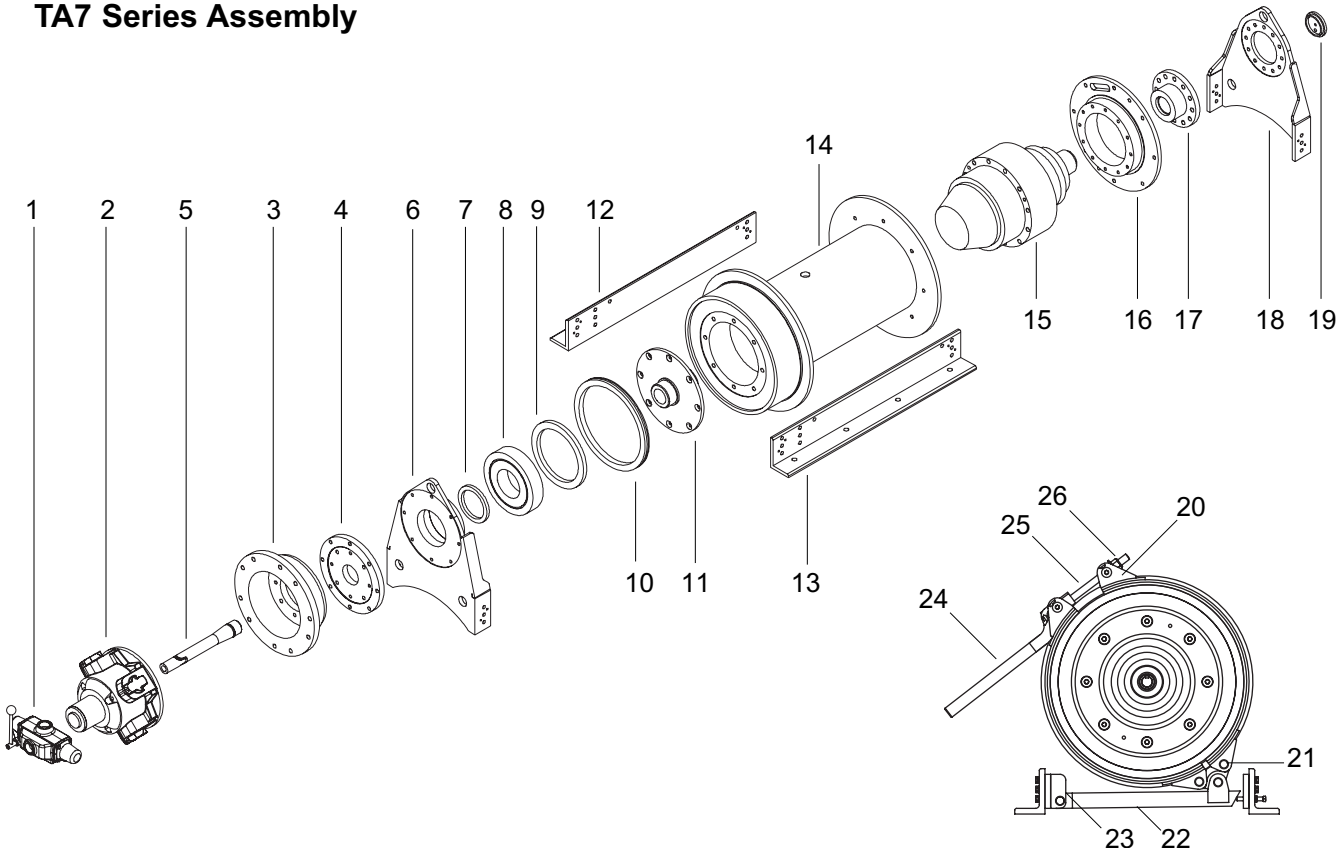


TA7 SERIES

TA7 ASSEMBLY

item	description	part no.	qty.
1	CONTROL VALVE	B4676	1
2	PISTON AIR MOTOR	C3989	1
3	MOTOR ADAPTER	C3962	1
4	ADAPTER PLATE	B4444	1
5	INPUT SHAFT ASSEMBLY	B4724	1
6	MOTOR END PLATE	D2699	1
7	SEAL OIL CR VR2 TYPE	A8470	1
8	BEARING RADIAL BALL 3.5433 X 6.2992 X 1.1811	A8478	1
9	SEAL OIL 110MM X 140MM X 12MM	A8480	1
10	SEAL OIL 8.OOID X 10.OOOD X .625	A8481	1
11	DRUM SHAFT	C3993	1
12	REAR ANGLE		
12a	REAR ANGLE - 24 INCH DRUM	D2851	1
12b	REAR ANGLE - 30 INCH DRUM	D2843	
12c	REAR ANGLE - 36 INCH DRUM	D2714	1
13	FRONT ANGLE		
13a	FRONT ANGLE - 24 INCH DRUM	D2852	1
13b	FRONT ANGLE - 30 INCH DRUM	D2844	
13c	FRONT ANGLE - 36 INCH DRUM	D2715	1
14	DRUM		
14a	DRUM - 24 INCH DIA	D2855	1
14b	DRUM - 30 INCH DIA	D2847	
14c	DRUM - 36 INCH DIA	D2697	1
15	REDUCER	D2683	1
16	REDUCER MOUNT	D2696	1
17	REDUCER SHAFT HOLDER	B4416	1
18	REDUCER END PLATE	D2698	1
19	SHAFT END CAP	A8406	2
20	BAND BRAKE HALF	C4012	2
21	CLEVIS PINS	A8465	1
22	BRAKE ANCHOR BAR	B4447	1
23	ANCHOR MOUNT	B4452	1
24	BRAKE HANDLE	C4021	1
25	BRAKE TOP LINK	B4449	1
26	BRAKE TENSIONING NUT	B3515	1

TA7 Series Assembly



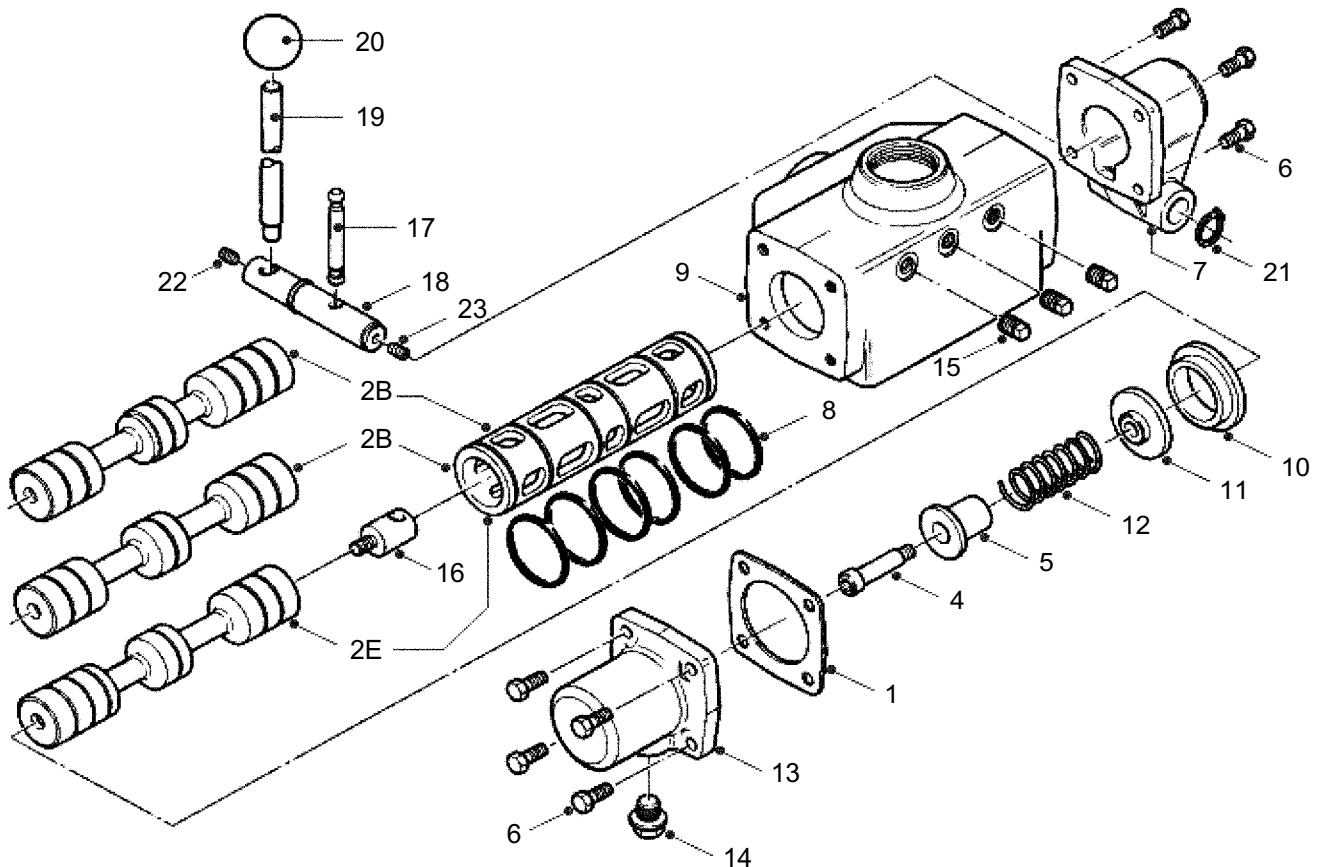
TA7 SERIES

CONTROL VALVE Part No. B4676

item	description	part no.	qty.
1	END CAP GASKET	521-066	2
2E	MATCHED SPOOL AND SLEEVE	521-913	1
2B	MATCHED SPOOL AND SLEEVE	521-914	1
4	SHOULDER SCREW 10 MM	817-002	1
5	CENTERING SHAFT GUIDE	521-071	1
6	SET SCREW M8 X 25	802-033	8
7	LEVER CAP	523-041	1
8	O RING 2X 2-1/8	808-013	6
9	VALVE BODY	521-060	1
10	VALVE SLEEVE SPACER	521-068	1
11	WASHER, SPRING CENTERING	521-072	1
12	SPRING FLEXO	814-020	1
13	END CAP -SPRING END	521-064	1
14	VENT PLUG	113-050	1
15	PLUG 1/4 BSPT SQ. HEAD	816-061	3
16	TOGGLE SHAFT	523-024	1
17	TOGGLE PIN	523-026	1
18	HAND LEVER PIVOT	523-008	1
19	HAND LEVER	313-002	1
20	BLACK PLASTIC KNOB 1-1/2	818-002	1
21	CIRCLIP 20MM EXTERNAL	804-013	2
22	GRUB SCREW M8 X 10	815-010	1
23	GRUB SCREW M8 X 16	815-002	1

¹ Old-style handle. Most products are shipped with the one piece new-style handle. Order part no. B4558 for handle and part no. A8282 for handle setscrew.

TA7 Series Control Valve

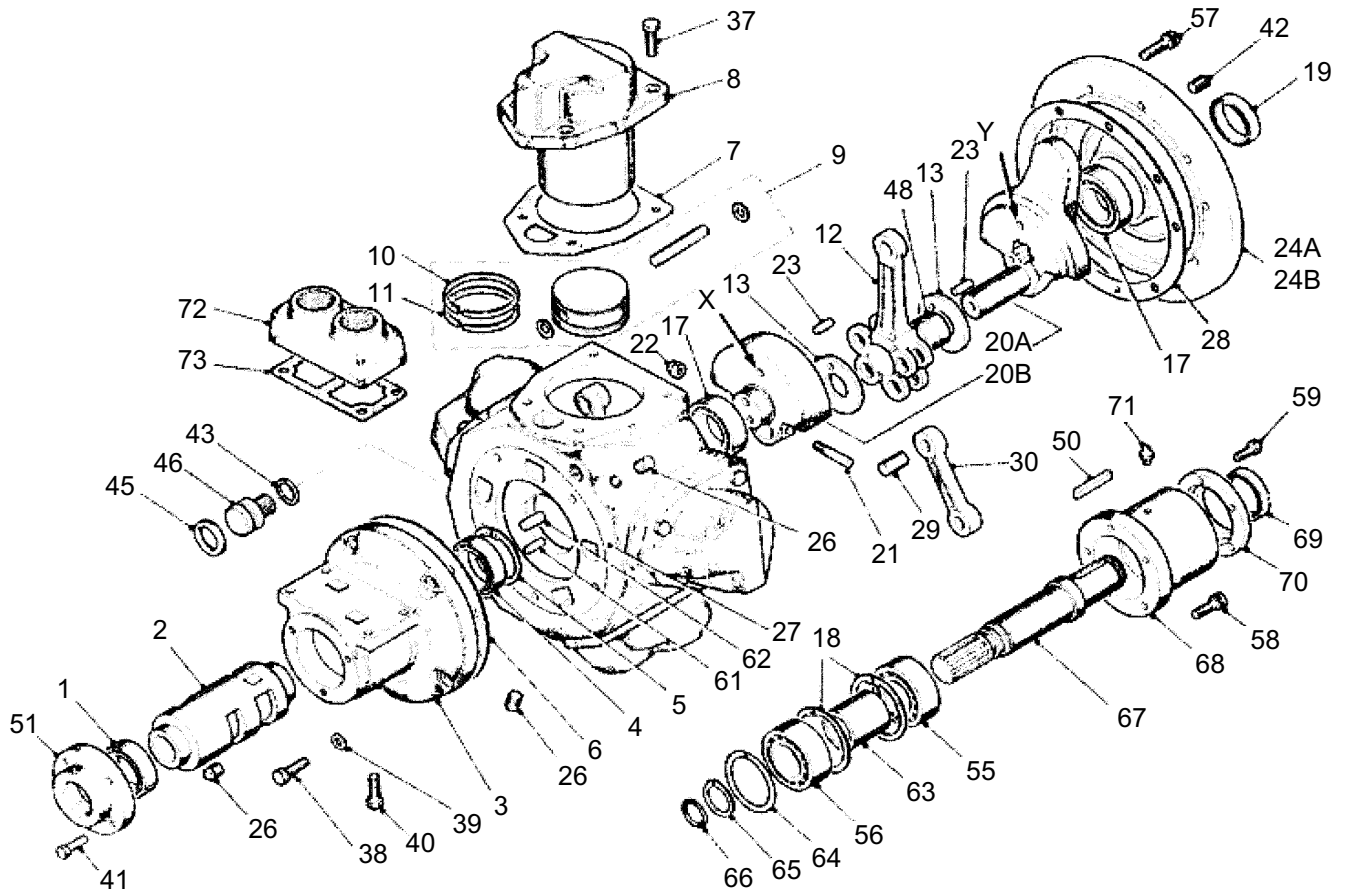


TA7 SERIES

TA7 PISTON AIR MOTOR Part No. C3989

item	description	part no.	qty.	kit no.
1	ROTARY VALVE BEARING (OUTER)	807-006	1	
2	ROTARY VALVE	520-006	1	
3	ROTARY VALVE HOUSING	520-011	1	
4	ROTARY VALVE BEARING (INNER)	807-005	1	
5	ROTARY VALVE BEARING CIRCLIP	804-066	1	
6	ROTARY VALVE HOUSING GASKET	-	1	529-911
7	CYLINDER GASKET	-	5	529-911
8	CYLINDER	510-082	5	
9	PISTON ASSEMBLY	520-902A	5	
10	COMPRESSION RING	-	5	529-911
11	OIL CONTROL RING	-	5	529-911
12	KING ROD	520-077	1	
13	CRANKSHAFT SPACER	520-052	2	
17	CRANKSHAFT BEARING	807-062	2	
18	CRANKSHAFT BEARING CIRCLIP	804-068	2	
19	CRANKSHAFT OILSEAL	-	1	529-911
20	STD CRANKSHAFT ASSEMBLY	520-901	1	
21	CRANK BOLT	510-088	1	
22	CRANK NUT	801-009	1	
23	SPRING DOWEL	806-013	2	
24	STD FLANGE PLATE	520-076	1	
26	PLUG	816-071	3	
27	ENGINE CASE	520-012	1	
28	ENGINE CASE GASKET	-	1	529-911
29	QUEEN ROD PIVOT	520-081	4	
30	QUEEN ROD	520-078	4	
37	CYLINDER BOLTS	802-074	20	
38	VALVE HOUSING BOLTS	802-073	5	
39	WASHER (FOR ITEM 38)	803-015	5	
40	ADAPTOR PLATE BOLT	802-054	4	
41	EXHAUST COVER BOLTS	802-033	4	
42	FLANGE PLATE PLUGS	815-008	5	
45	SEAL (TRANSIT ONLY)	808-004	1	
46	BREATHER PLUG	130-066	1	
48	NEEDLE BEARING	807-047	1	
50	KEY	811-030	1	
51	ROTARY VALVE EXHAUST COVER	520-005	1	
55	OUTPUT SHAFT BRG (OUTER)	807-063	1	
56	OUTPUT SHAFT BRG (INNER)	807-012	1	
57	FLANGE PLATE CAP SCREWS	809-001	10	
58	OUTPUT HOUSING BOLTS	809-002	5	
59	OUTPUT HOUSING COVER BOLTS	802-016	5	
61	DRIVE PIN (DIA 10MM)	806-001	1	
62	DRIVE PIN (DIA 12MM)	806-002	1	
63	OUTPUT SHAFT BEARING SPACER	518-001	1	
64	OUTPUT SHAFT SPRING RING	518-004	1	
65	OUTPUT SHAFT CIRCLIP	804-017	1	
66	OUTPUT SHAFT SEAL	-	1	529-911
67	OUTPUT SHAFT	518-003	1	
68	OUTPUT SHAFT HOUSING	518-005	1	
69	OUTPUT SHAFT OILSEAL	808-042	1	
70	OUTPUT SHAFT HOUSING COVER	518-002	1	
71	OUTPUT SHAFT GREASE NIPPLE	816-015	1	
72	INLET ADAPTOR PLATE	520-003	1	
73	INLET ADAPTOR PLATE GASKET	-	1	529-911
	RM510 SEAL KIT	529-911		

TA7 Series Motor Assembly

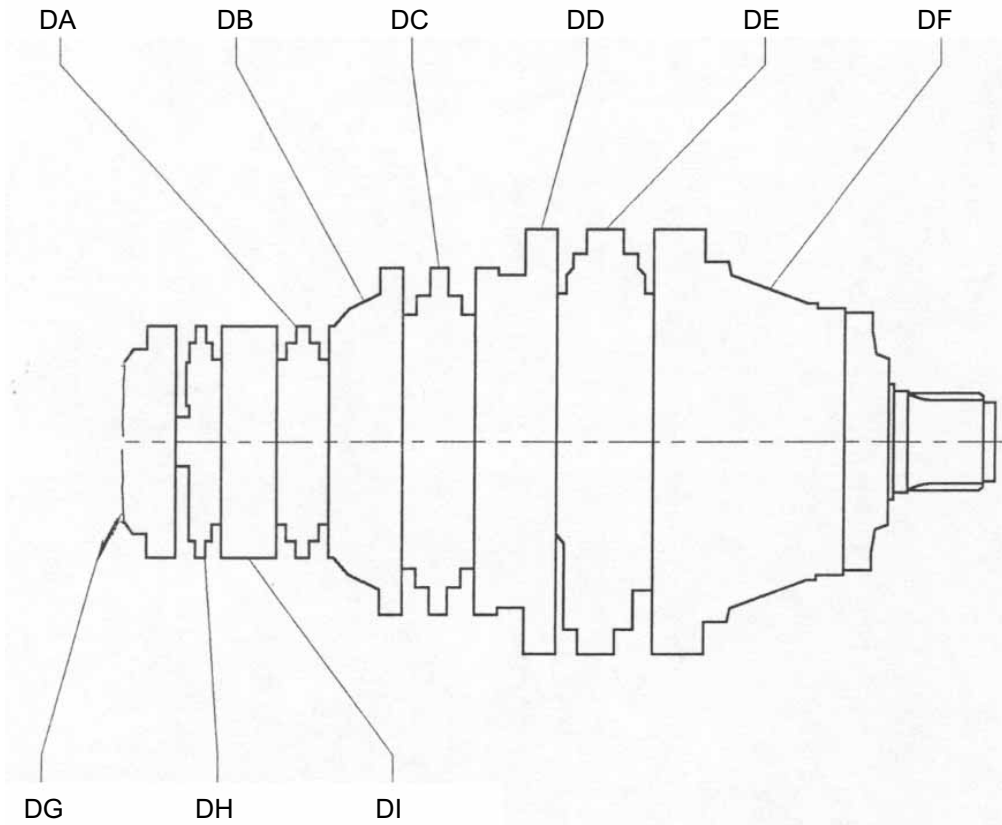


TA7 SERIES

TA7 PLANETARY GEAR REDUCER ASSEMBLY

item	description	part no.	qty.
DA	GEAR REDUCER SECTION	00-3110	1
DB	GEAR REDUCER SECTION	00-4043	1
DC	GEAR REDUCER SECTION	00-3004	1
DD	GEAR REDUCER SECTION	00-4070	1
DE	GEAR REDUCER SECTION	03-3013	1
DF	GEAR REDUCER SECTION	00-4130	1
DG	GEAR REDUCER SECTION	06-3024	1
DH	GEAR REDUCER SECTION	00-4201	1
DI	GEAR REDUCER SECTION	00-1200	1

TA7 Series Gear Reducer Assembly



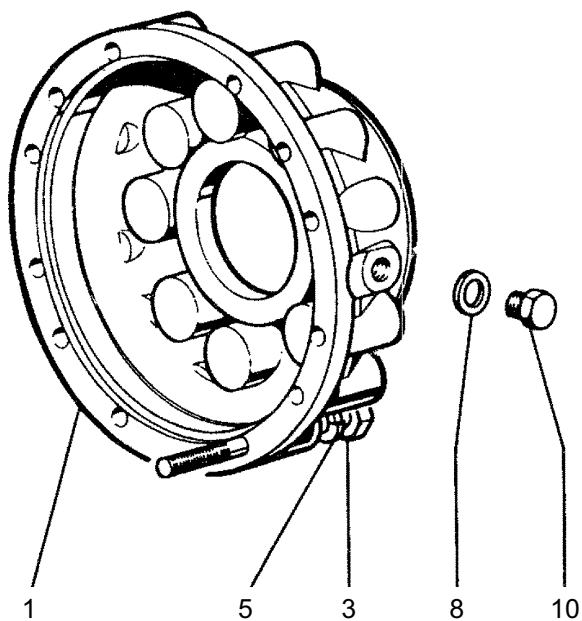
TA7 SERIES

TA7 GEAR REDUCER SECTION DA

Part No. 00-3110

item	description	part no.	qty.
1	INPUT FLANGE	34601314000	1
3	SCREW	46111900000	8
5	WASHER	46701100101	8
8	WASHER	41700300100	3
10	PLUG	45104400000	3

TA7 Series Gear Reducer Section DA

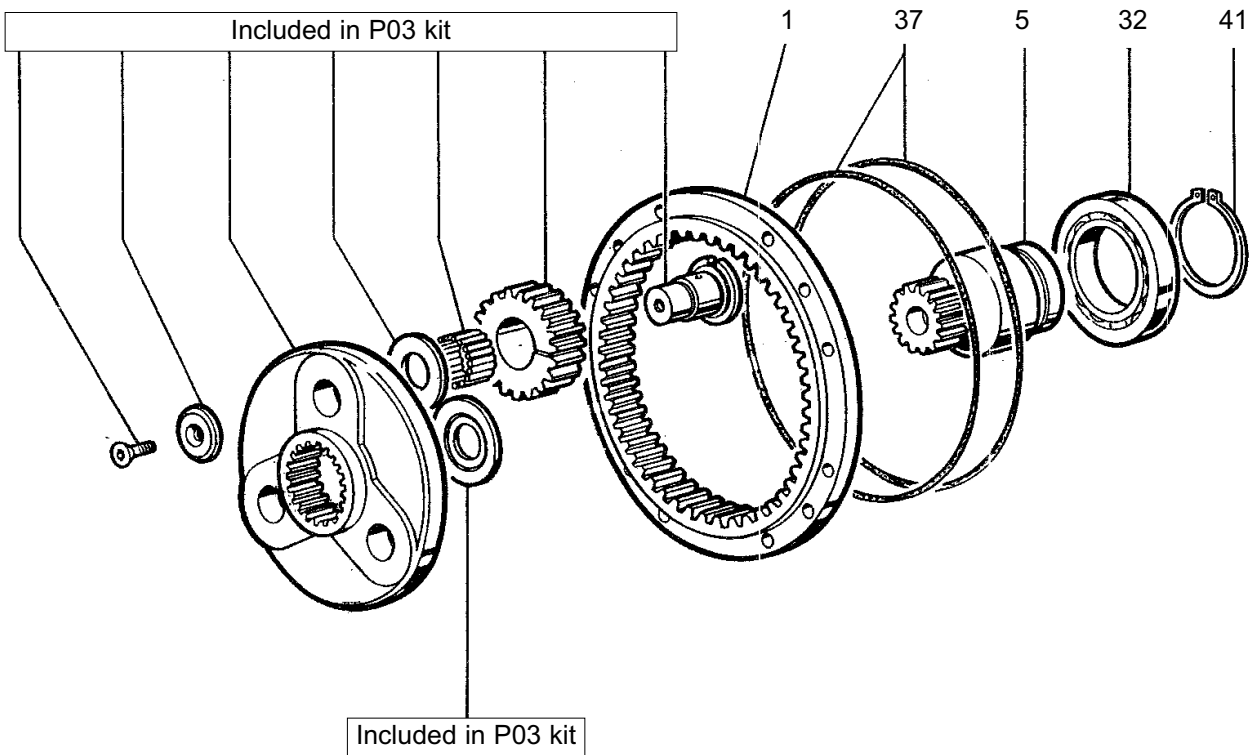


TA7 SERIES

TA7 GEAR REDUCER SECTION DB Part No. 00-4043

item	description	part no.	qty.
P03	SUBASSEMBLY – 4.13 RATIO	211B8230000	1
1	RING-GEAR	32001021100	1
5	PINION	32606231900	1
32	BEARING	42119300000	1
37	O-RING	41220900000	2
41	CIRCLIP	43106300000	1

TA7 Series Gear Reducer Section DB

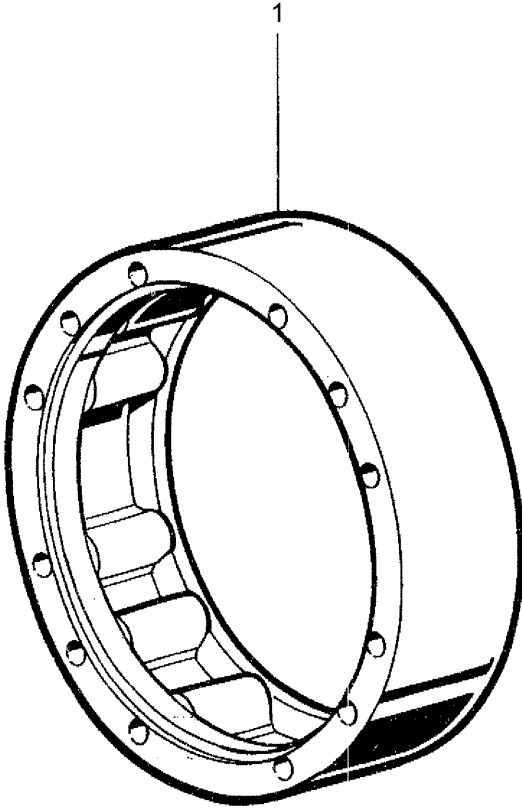


TA7 SERIES

TA7 GEAR REDUCER SECTION DC
Part No. 00-3004

item	description	part no.	qty.
1	INTERMEDIATE FLANGE	34200524000	1

TA7 Series Gear Reducer Section DC

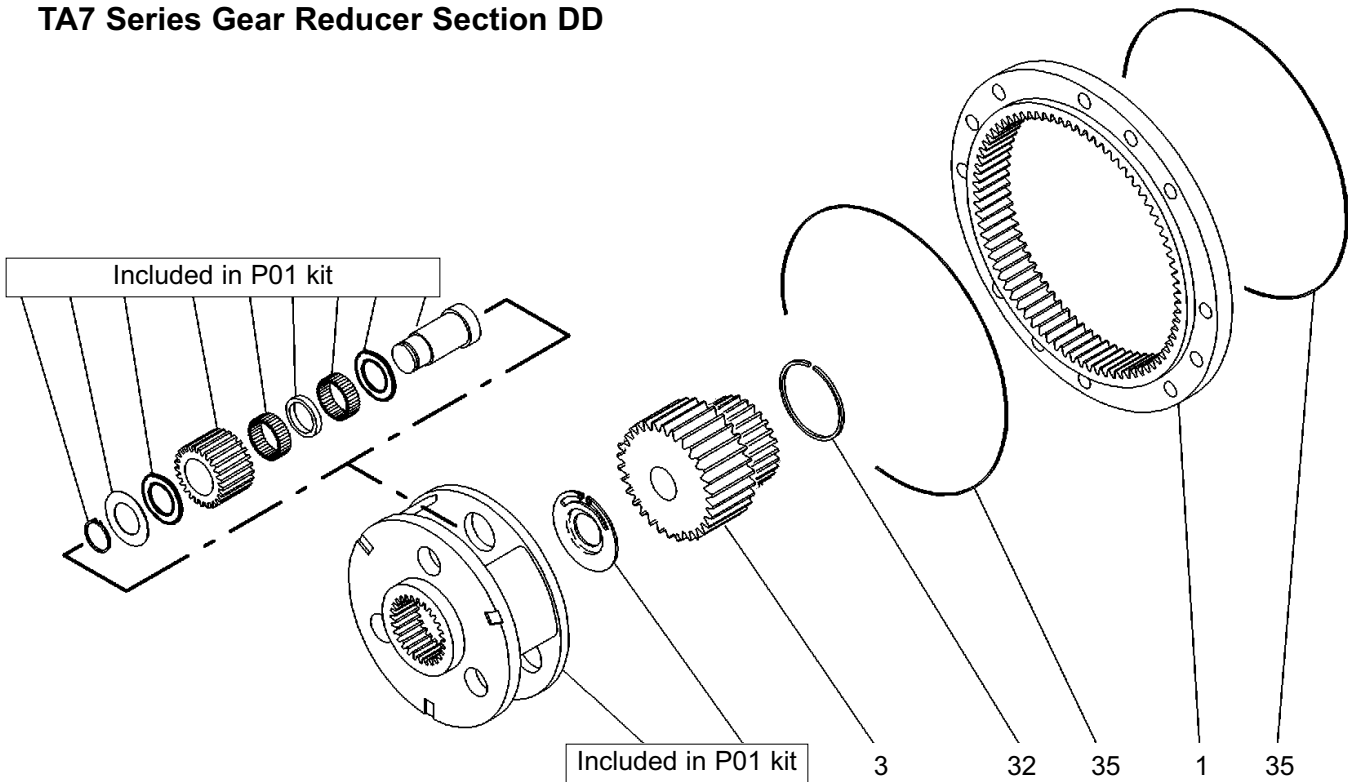


TA7 SERIES

TA7 GEAR REDUCER SECTION DD Part No. 00-4070

item	description	part no.	qty.
1	RING-GEAR	32001421100	1
3	SUN PINION	32729130300	1
32	DISK	43303900000	1
35	O-RING	41220900000	2
P01	REDUCTION STAGE KIT – 3.5 RATIO	211C422000N	1

TA7 Series Gear Reducer Section DD

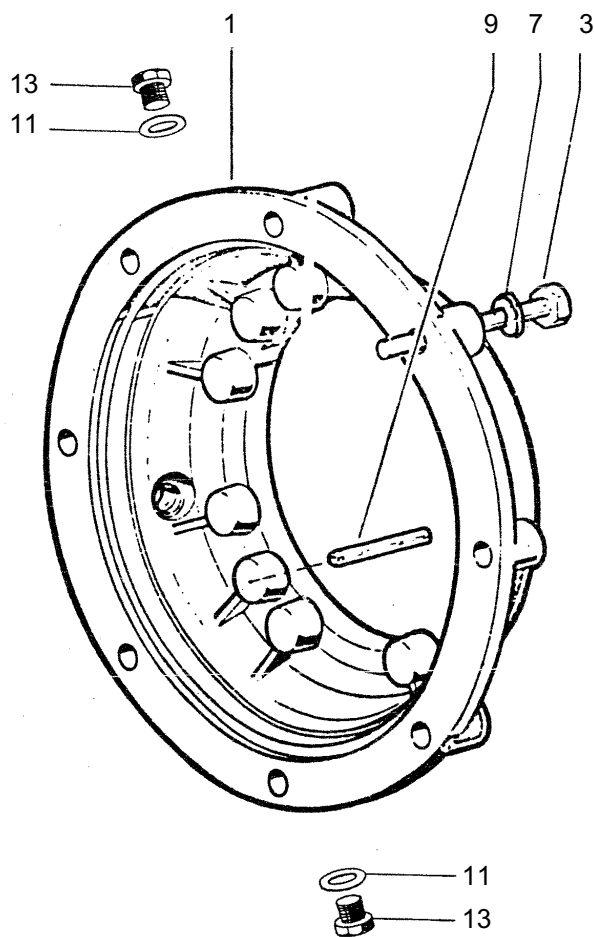


TA7 SERIES

TA7 GEAR REDUCER SECTION DE Part No. 03-3013

item	description	part no.	qty.
1	INTERMEDIATE FLANGE	34201314000	1
3	SCREW	46117800100	8
7	WASHER	46701300101	8
9	PIN	43839640100	4
11	WASHER	41700300100	3
13	PLUG	45104400000	3

TA7 Series Gear Reducer Section DE

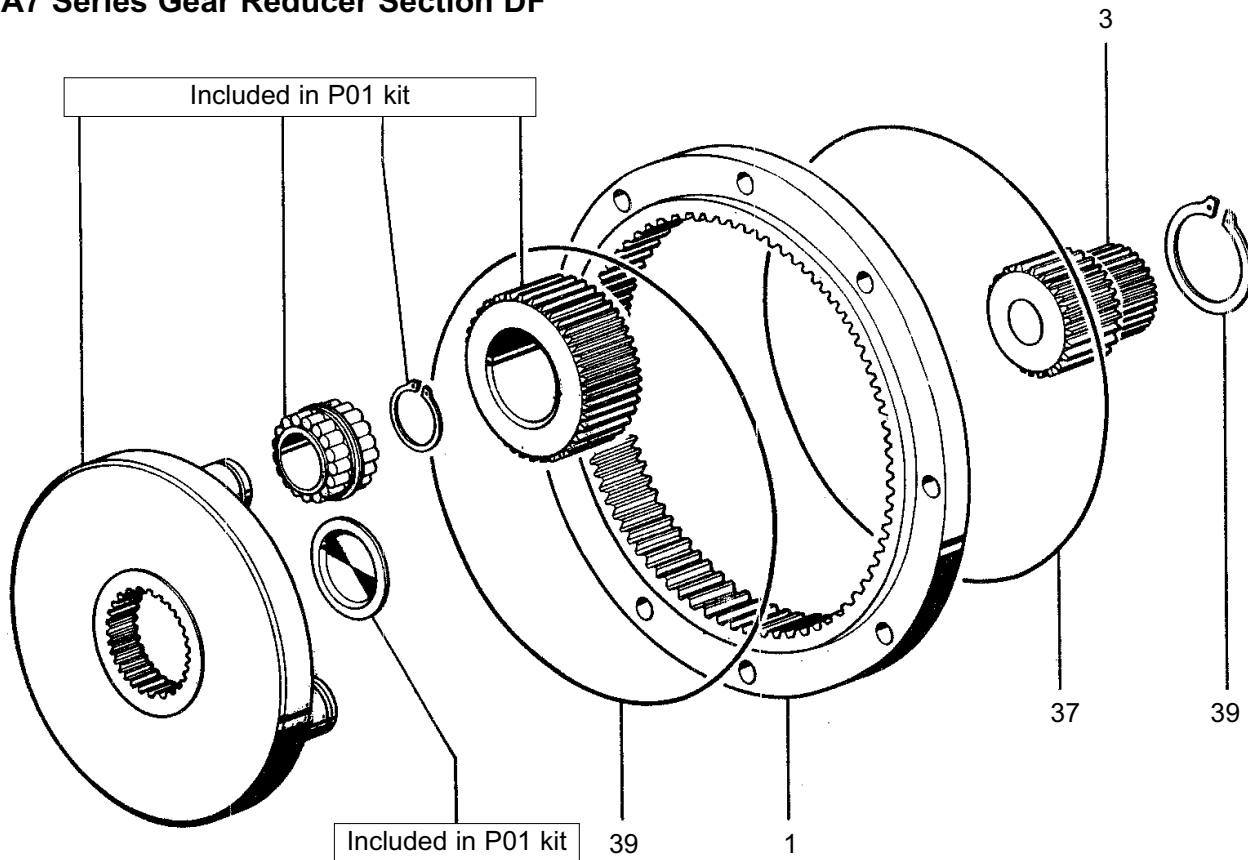


TA7 SERIES

TA7 GEAR REDUCER SECTION DF Part No. 00-4130

item	description	part no.	qty.
P01	SUBASSEMBLY – 4.08 RATIO	211E423X200	1
1	RING-GEAR	32002321100	1
3	SUN PINION	32788130300	1
37	CIRCLIP	43106100000	1
39	O-RING	41238200000	2

TA7 Series Gear Reducer Section DF



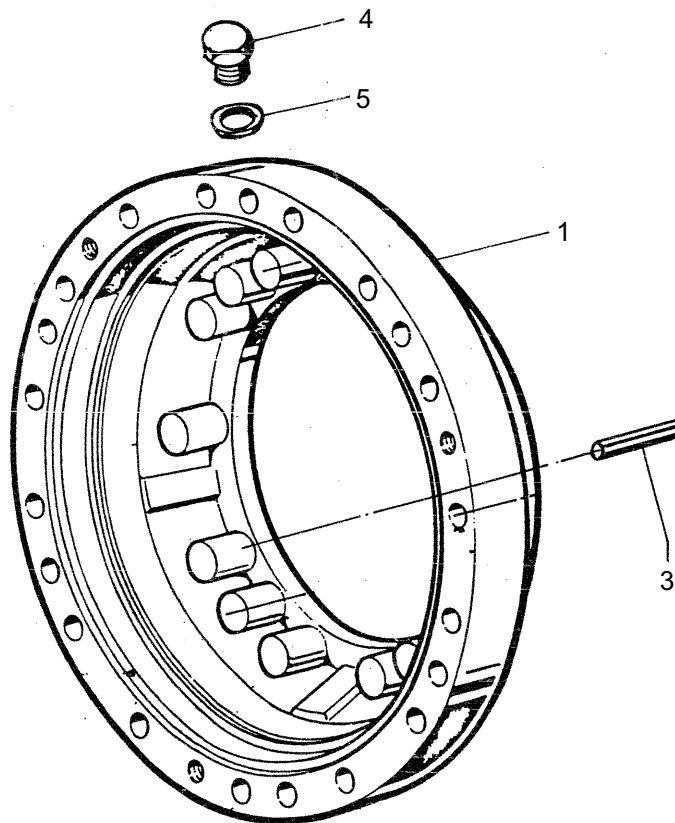
TA7 SERIES

TA7 GEAR REDUCER SECTION DG

Part No. 06-3024

item	description	part no.	qty.
1	INTERMEDIATE FLANGE	34202824000	1
3	PIN	43843040100	4
4	PLUG	45104400000	3
5	WASHER DIN7603-A 17x23 - A1	41700300100	3

TA7 Series Gear Reducer Section DG

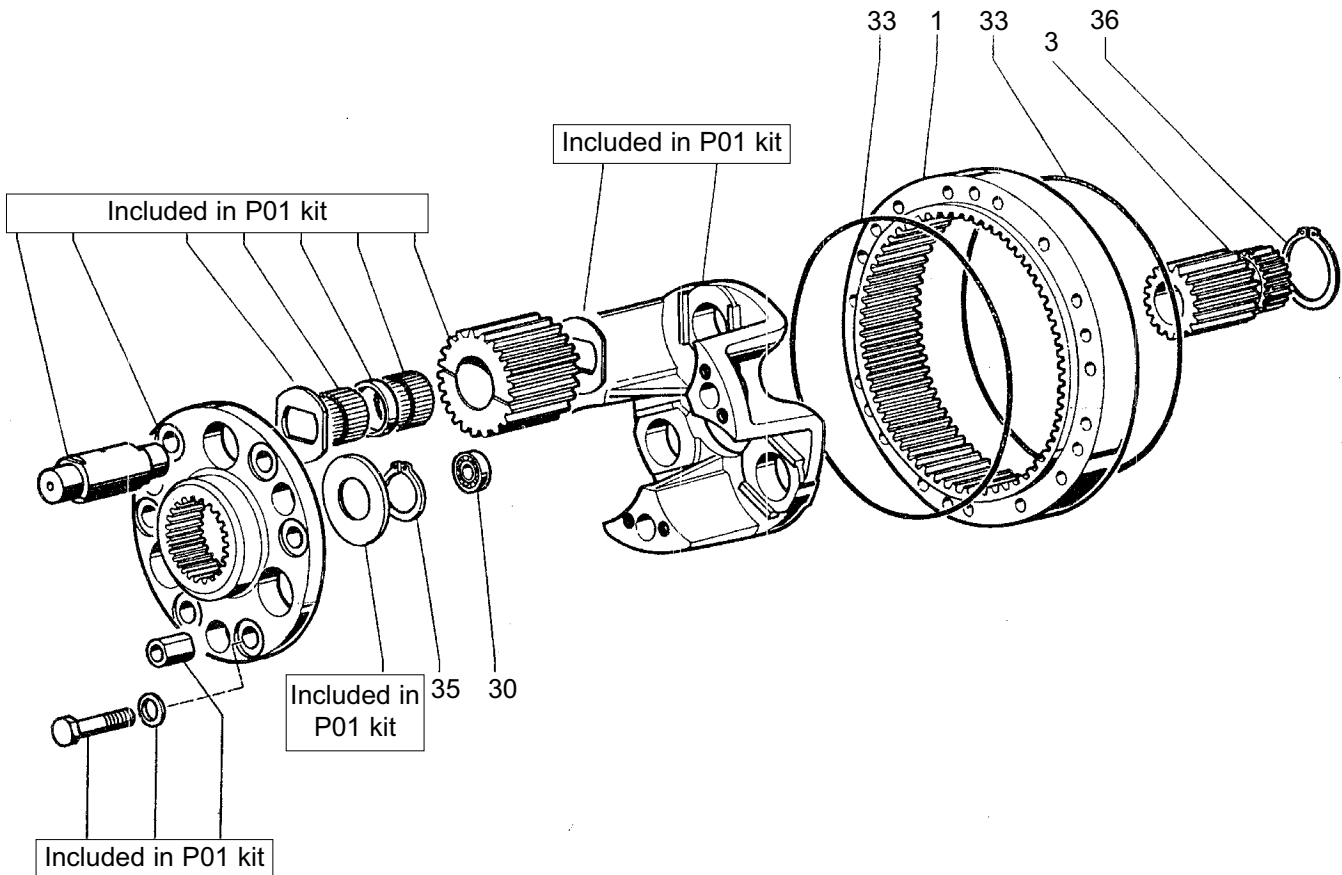


TA7 SERIES

TA7 Gear Reducer Section DH Part No. 00-4201

item	description	part no.	qty.
P01	SUBASSEMBLY – 4.04 RATIO	211F4230100	1
1	RING-GEAR	32003212100	1
3	SUN PINION	32720530300	1
30	BEARING	42109900000	1
33	O-RING	41238700000	2
35	CIRCLIP	43105600000	1
36	CIRCLIP	43107000000	1

TA7 Series Gear Reducer Section DH

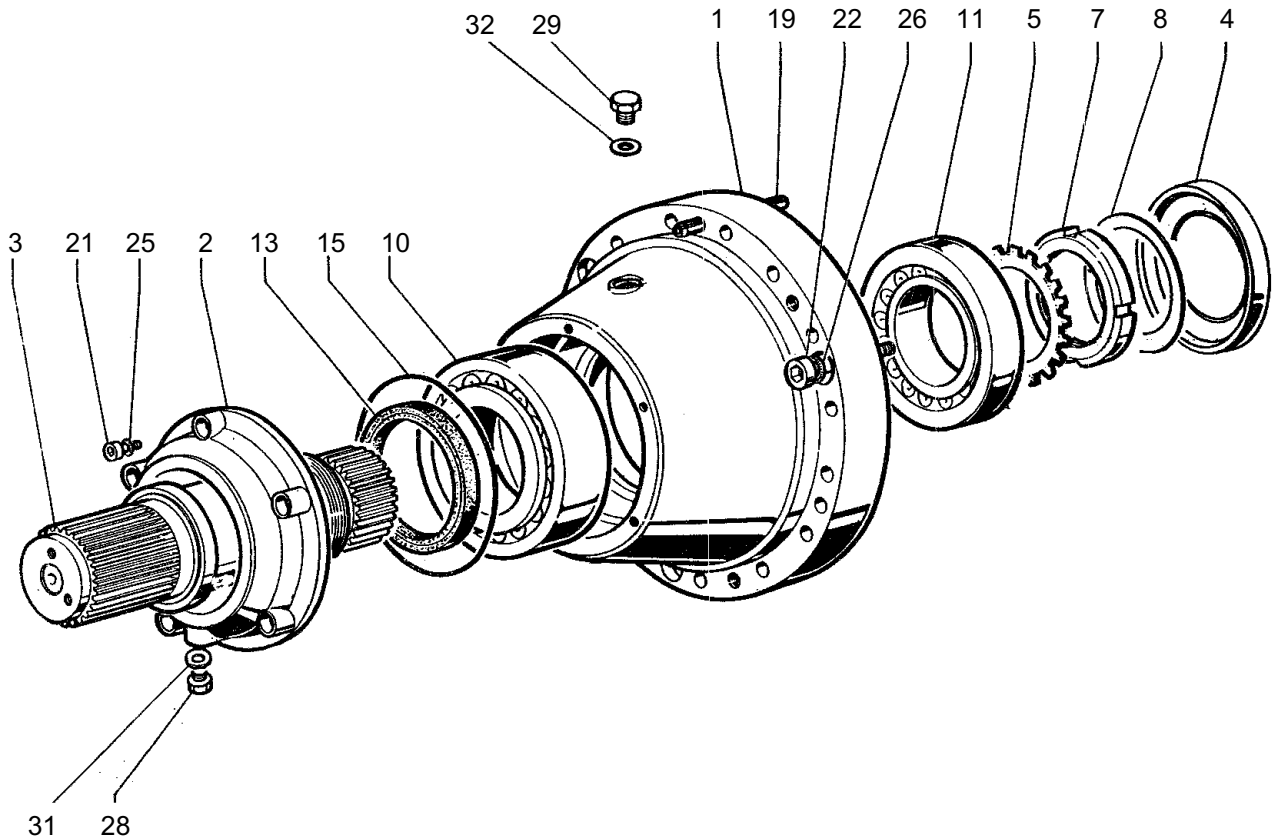


TA7 SERIES

TA7 GEAR REDUCER SECTION DI Part No. 00-1200

item	description	part no.	qty.
1	SUPPORT	35203714000	1
2	COVER	35403524000	1
3	SHAFT	31123920500	1
4	SPACER	36381946300	1
5	WASHER	37221536400	1
7	LOCK NUT	47102200000	1
8	WASHER	43185200103	3
10	BEARING	42221500000	1
11	BEARING	42220600000	1
13	OIL SEAL	41138300000	1
15	O-RING	41220900000	1
19	SPRING PIN	43849740100	3
21	SCREW	46207900000	5
22	SCREW	46221600000	3
25	WASHER	46903500000	5
26	WASHER	46903900000	3
28	PLUG	45104300000	1
29	PLUG	45104700000	3
31	WASHER	41700200100	1
32	WASHER	41700500100	3

TA7 Series Gear Reducer Section DI





THERN

**Thern, Incorporated
5712 Industrial Park Road
Winona, MN 55987**

**PHN 507-454-2996
FAX 507-454-5282**

**EMAIL: info@thern.com
www.thern.com**