

CHAPTER 65

TAIL ROTOR DRIVE SYSTEM

<i>Figure</i>	<i>Title</i>	<i>Page</i>
65-1	Tail Rotor Drive Shaft Installation	65.0
65-5	Damper Assembly	65.4
65-7	Tail Rotor Gearbox Installation	65.6
65-11	Tail Rotor Gearbox Seals	65.10

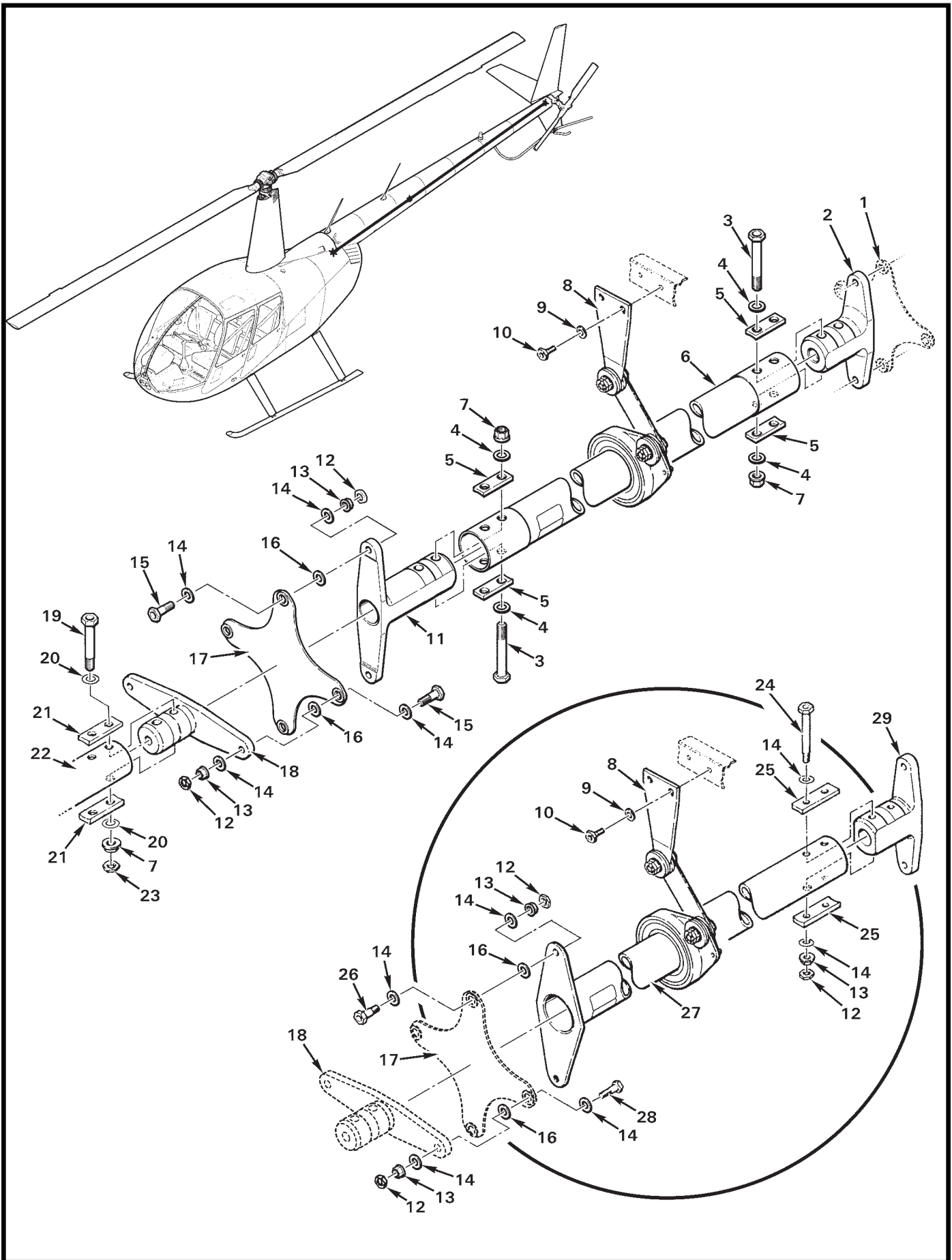


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR DRIVE SHAFT INSTALLATION				
65-1-1	C947-3	Flex Plate (Ref, see Figure 65-7)		
2	D195-2	Yoke	X	1
3	NAS6605-28	Bolt	X	4
4	NAS1149F0532P	Washer	X	8
5	C191-7	Block	X	4
6	D224-2*	Tail Rotor Drive Shaft Assembly (Supersedes D224-1; includes D196-1 drive shaft, items 2 thru 5, and 7 thru 11.) . . .	X	1
	D196-1	Tail Rotor Drive Shaft (Ref; aluminum shaft)	O	1
7	MS21042L5	Nut	X	6
8	C041-1	Damper Assembly (see Figure 65-5)	X	1
9	NAS1149F0363P	Washer	X	2
10	NAS6603-3	Bolt	X	2
11	D195-1	Yoke	X	1
12	B330-13	Palnut ([6] required with item 27)	X	4
13	D210-4	Nut	X	4
14	NAS1149F0432P	Washer ([12] required with item 27)	X	8
15	NAS6604-6	Bolt (or NAS6604-7)	X	4
16	NAS1149F0432P	Washer (or NAS1149F0463P)	X	8
17	A947-2	Flex Plate	X	1
18	C195-1	Yoke (length = 2.100 in.)	X	1
	C195-2	Yoke (length = 2.220 in.)	X	1
	C195-3	Yoke (length = 2.340 in.)	X	1
	C195-4	Yoke (length = 2.460 in.)	X	1
19	NAS6605-24	Bolt	X	2
20	NAS1149F0532P	Washer	X	4
21	C191-6	Block	X	2
22	C166-4	Shaft – Clutch (Ref, see Figure 63-15)		
23	B330-16	Palnut	X	2
24	NAS6604-28	Bolt	X	2
25	C191-2	Block	X	2
26	NAS6604-4	Bolt (or NAS6604-5)	X	2

NOTES * See Figure 99-23 for shipping crate.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR DRIVE SHAFT INSTALLATION (Cont'd)				
65-1-27	D224-1	Tail Rotor Drive Shaft Assembly – Steel Shaft (Ref, no longer available)		
	C196-1	Tail Rotor Drive Shaft (Ref; steel, no longer available)		
28	NAS6604-5	Bolt (or NAS6604-6)	X	2
29	C195-5	Yoke (used with item 27)	X	1
NOTES				

Intentionally Blank

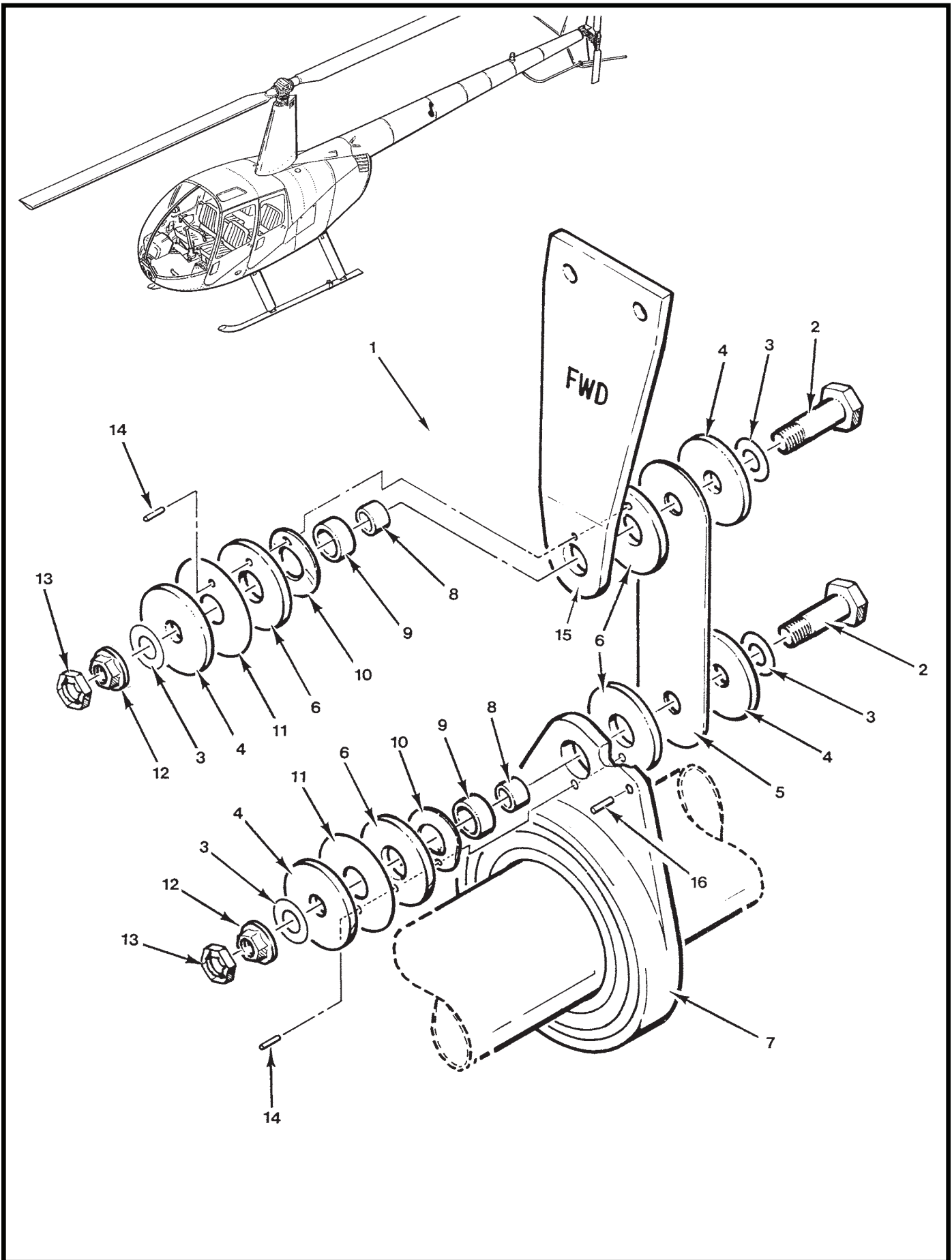


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
DAMPER ASSEMBLY				
65-5-1	C041-1	Damper Assembly (Incl items 2 thru 16)	X	1
2	NAS6604-6	Bolt	X	2
3	NAS1149D0416J	Washer	X	4
4	A141-37	Washer	X	4
5	C041-3	Link	X	1
6	C041-5	Washer	X	4
7	C041-11	Bearing Assembly (includes bearing and housing)	X	1
	C172-1	Housing	O	1
8	A105-12	Journal	X	2
9	05DU04	Bushing	X	2
10	C041-6	Spring Washer	X	2
11	A141-36	Washer	X	2
12	D210-4	Nut	X	2
13	B330-13	Palnut	X	2
14	A041-10	Dowel Pin	X	2
15	C041-8	Arm	X	1
16	MS16562-11	Roll Pin	X	1

NOTES

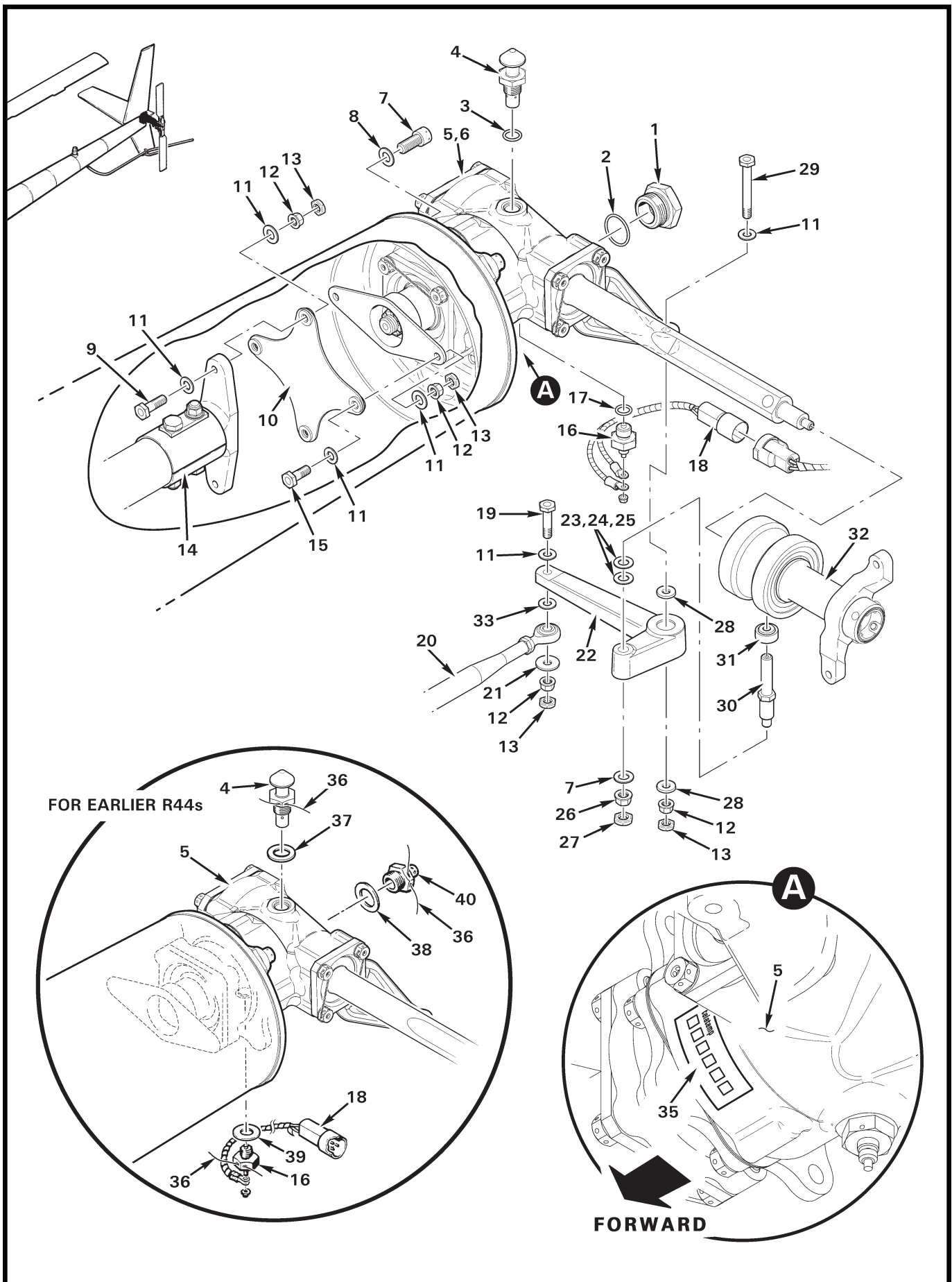


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR GEARBOX INSTALLATION				
65-7-1	B563-4	Sight Gage (flat, UV filter)	X	1
2	A215-020	O-Ring	X	1
3	MS28778-5	Packing	X	1
4	A610-1	Filler – Vent Plug	X	1
5	C021-1	Gearbox Assembly – Tail Rotor (Includes items 1 thru 4, 16 thru 18, 34, and 35. See also Figure 65-11.)	X	1
	C021-1R	C021-1 Gearbox Assembly – Tail Rotor (overhaul exchange)	X	1
6	A257-22*	Oil – Gear (1 gallon)	X	A/R
	A257-22QT*	Oil – Gear (1 quart)	X	A/R
	A257-2*	Oil – Gear (1 gallon)	X	A/R
	A257-2LT*	Oil – Gear (1 liter)	X	A/R
7	NAS1352-5-12P	Cap Screw (for tailcone S/N 3562 and subsequent)	X	4
	NAS1352-5H12P	Cap Screw (requires 0.032-in. dia. safety wire [item 36])	X	4
8	NAS1149F0532P	Washer	X	5
9	NAS6604-7	Bolt	X	2
10	C947-3	Flex Plate	X	1
11	NAS1149F0432P	Washer	X	10
12	D210-4	Nut	X	6
13	B330-13	Palnut	X	6
14	D224	Tail Rotor Drive Shaft Assembly (Ref, see also Figure 65-1)		
15	NAS6604-4	Bolt	X	2
16	B566-2	Chip Detector	X	1
17	MS28778-4	Packing	X	1
18	C049-1	Harness Assembly (chip detector)	X	1
19	NAS6604-10	Bolt (or NAS6604-11)	X	1
20	C121-17	Push-Pull Tube Assembly	X	1
21	A214-3	Washer	X	1
22	A120-3	Bellcrank Assembly	X	1
23	C117-34	Shim – Washer (thickness = 0.016 in.)	X	A/R
24	C117-35	Shim – Washer (thickness = 0.020 in.)	X	A/R
25	C117-36	Shim – Washer (thickness = 0.026 in.)	X	A/R
26	D210-5	Nut	X	1

NOTES * Use correct gearbox oil per R44 Service Letter SL-73.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR GEARBOX INSTALLATION (Cont'd)				
65-7-27	B330-16	Palnut	X	1
28	MS20002-4	Washer	X	2
29	NAS6604-25	Bolt	X	1
30	C125-1	Stud	O	1
31	A104-4	Bearing	O	1
32	C031-1	Pitch Control Assembly (Incl items 30 and 31)	X	1
	C031-1R	C031-1 Pitch Control Assembly (overhaul exchange)	O	1
33	NAS1149F0432P	Washer (or NAS1149F0463P to maintain clearance)	X	A/R
34	C545-1	Gear Set (not shown)	O	1
35	F110-2	Telatemp (Temperature Recorder, 140°–190°F)	X	1
	110-2	Telatemp (Temperature Recorder, 140°–190°F; earlier R44s)	O	1
36	MS20995C32	0.032-in. dia. Safety Wire	X	A/R
37	MS35769-9	Gasket	X	1
38	MS35769-11	Gasket	X	1
39	MS35769-8	Gasket	X	1
40	B563-1	Sight Gage (bubble).	X	1

NOTES

Intentionally Blank

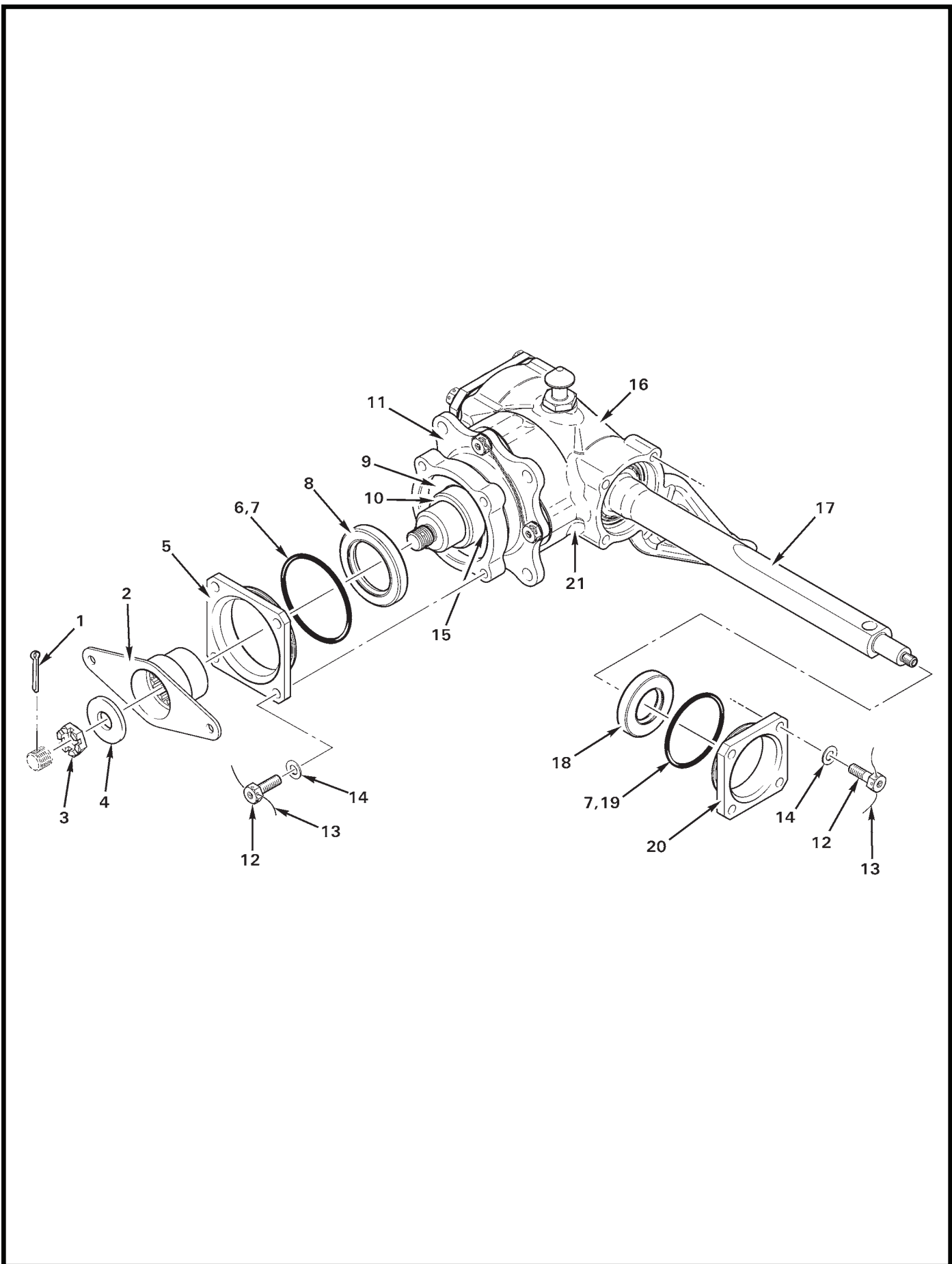


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR GEARBOX SEALS				
65-11-1	MS24665-210	Cotter Pin	X	1
2	C116-1	Yoke	X	1
3	AN320-8	Nut	X	1
4	A141-10	Washer	X	1
5	C112-1	Cap	X	1
6	C215-140	O-Ring (install using item 7)	X	1
7	A257-2	Gear Oil	X	A/R
8	A966-3	Seal	X	1
9	C141-2	Washer (Ref, between cap and input cartridge)	O	1
10	C266-2	Spacer	X	1
11	C110-1	Input Cartridge (Ref)	O	1
12	MS20074-04-06	Bolt	X	8
13	MS20995C32	0.032 in. dia. Safety Wire	X	A/R
14	NAS1149F0432P	Washer	X	8
15	A215-024	O-Ring (install using item 7)	X	1
16	C109-2	Housing (Ref)	O	1
17	C107-1	Shaft - Output (Ref)	O	1
18	C966-2	Seal	X	1
19	C215-133	O-Ring (install using item 7)	X	1
20	C112-2	Cap	X	1
21	C021-1	Tail Rotor Gearbox Assembly (Ref; Incl items 1 thru 20)		

NOTES

Intentionally Blank