

CHAPTER 65

TAIL ROTOR DRIVE SYSTEM

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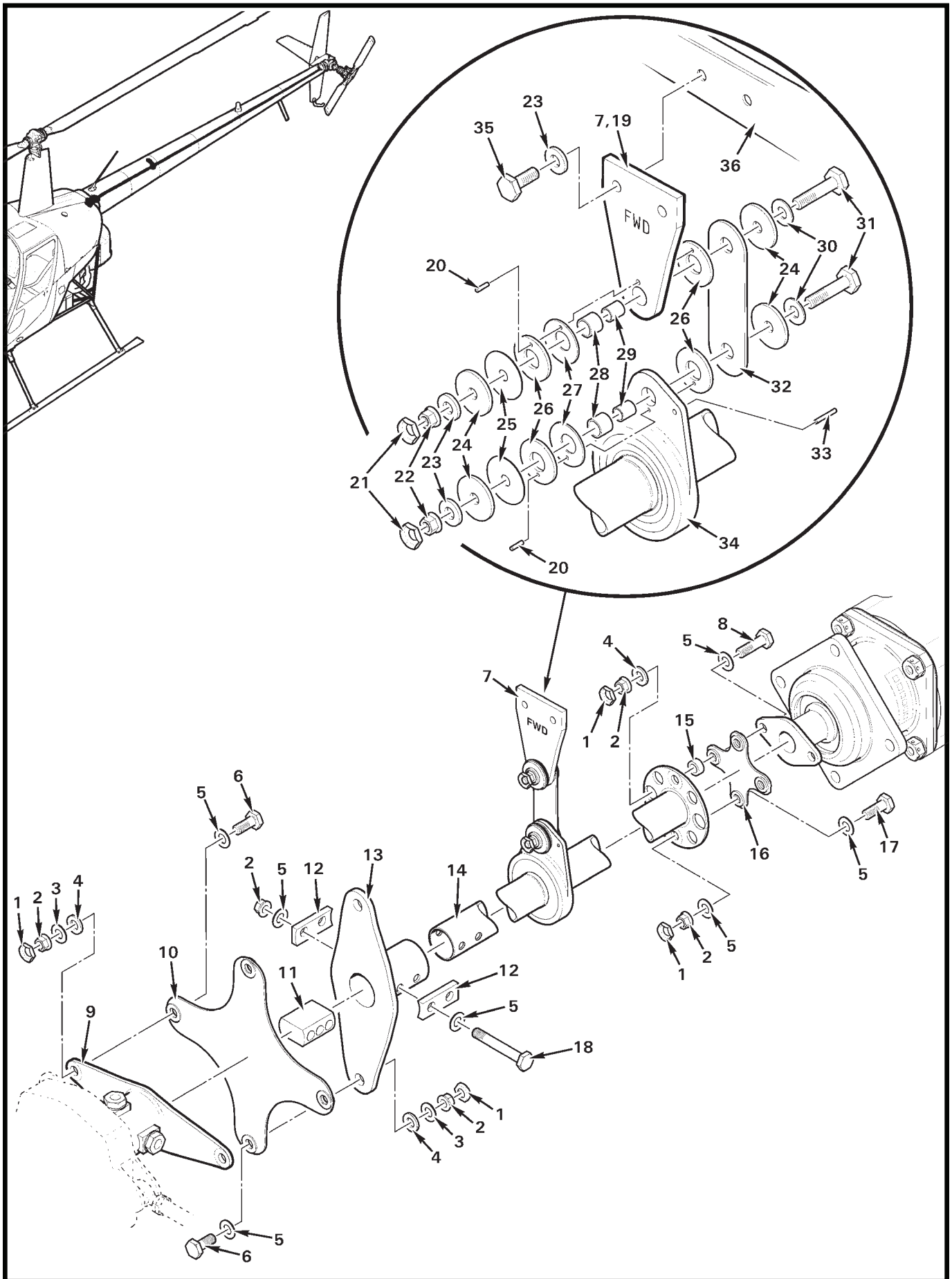


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR DRIVE SHAFT INSTALLATION				
65-1-1	B330-13	Palnut	X	8
2	D210-4	Nut	X	10
3	NAS1149F0432P*	Washer (or NAS1149F0463P)	X	4
4	NAS1149F0463P	Washer	X	6
5	NAS1149F0432P	Washer	X	14
6	NAS6604-3*	Bolt (or NAS6604-4)	X	4
7	A041-12	Damper Assembly (Incl items 19 thru 34)	X	1
	A041-1**	Damper Assembly (Ref)	X	1
8	NAS6604-7	Bolt	X	2
9	A195-1	Yoke	X	1
10	A947-2	Flex Plate	X	1
11	A553-2	Block	X	1
12	A207-4	Block	X	2
13	B223-1	Yoke (length 0.900-inch)	X	1
	B223-2	Yoke (length 1.050-inch)	X	1
	B223-3	Yoke (length 1.200-inch)	X	1
	B223-4	Yoke (length 1.350-inch)	X	1
	B223-6	Yoke (length 0.750-inch)	X	1
14	B224-1**	Tail Rotor Drive Shaft (Incl item 7 [A041-1])	X	1
	B224-3	Tail Rotor Drive Shaft (Incl item 7 [A041-12])	X	1
15	A559-1	Spacer	X	2
16	A947-3	Flex Plate	X	1
17	NAS6604-4	Bolt	X	2
18	NAS6604-21	Bolt	X	2
19	A041-13	Arm (thick)	X	1
20	A041-10	Dowel Pin	X	2
21	B330-7	Palnut	X	2
22	D210-3	Nut	X	3
23	NAS1149F0363P	Washer	X	2
24	A141-18	Washer	X	4
25	A141-15	Washer	X	2
26	A041-5	DU Washer	X	4
27	A041-6	Spring Washer	X	2
28	O4DU04	Bushing (bearing)	X	2
29	A105-9	Journal – Bearing	X	2

NOTES * Select hardware which, after correct torque is applied, exposes 2 to 4 threads beyond nut.
 ** Not shown, see Figure 65-5.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAIL ROTOR DRIVE SHAFT INSTALLATION (Cont'd)				
65-1-30	NAS1149F0332P	Washer	X	2
31	NAS6603-8	Bolt	X	2
32	A041-3	Arm (thin)	X	1
33	MS16562-11	Pin – Spring	X	1
34	A041-11	Bearing Assembly (B224 two-piece drive shafts only)	X	1
35	NAS6603-3	Bolt	X	2
36	B288-8	Support (Ref, installed on A023-22 and -23 tailcone) * * *		
37	KI-94	Damper Conversion Kit (For ship S/N 2570 and prior. Allows installation of B224-1 tail rotor drive shaft into A023-22 or -23 tailcone. Includes items 19 thru 27, 28 [1 ea.], 29, 35, 38, and 39.)	X	1
38	A041-10	Pin	X	1
39	A651-1	Data Plate – “KI-94 MOD”	O	1

NOTES

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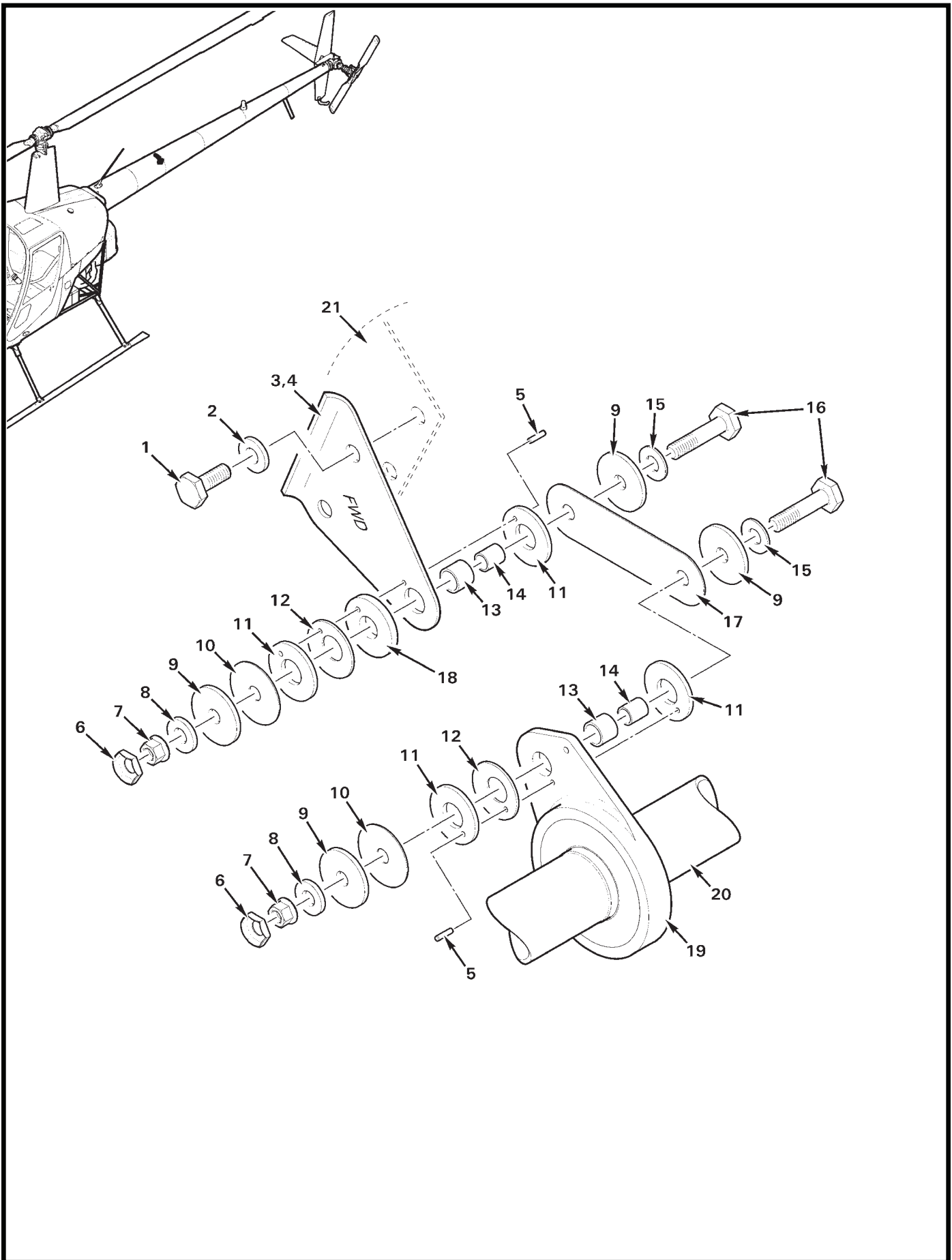


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
DAMPER ASSEMBLY				
65-5-1	NAS6603-3	Bolt	X	2
2	NAS1149F0363P	Washer	X	2
3	A041-1	Damper Assembly (Incl items 4 thru 19)	X	1
4	A041-8	Clip	X	1
5	A041-10	Pin	X	2
6	B330-7	Palnut	X	2
7	D210-3	Nut	X	2
8	NAS1149F0363P	Washer	X	2
9	A141-18	Washer	X	4
10	A141-15	Washer	X	2
11	A041-5	DU Washer	X	4
12	A041-6	Spring Washer	X	2
13	04DU04	Bushing (bearing)	X	2
14	A105-9	Journal	X	2
15	NAS1149F0332P	Washer	X	2
16	NAS6603-8	Bolt	X	2
17	A041-3	Arm	X	1
18	A041-9	Spacer	X	1
19	A041-11	Bearing Assembly (includes bearing and housing)	X	1
	A647-8	Bearing	O	1
	A172-1	Housing	O	1
20	B224-1	Drive Shaft – Tail Rotor (Ref; includes item 3. Used with A041-1 only.)		
21	A023-1	Tailcone Assembly (Ref)		
	A023-20	Tailcone Assembly (Ref)		

NOTES

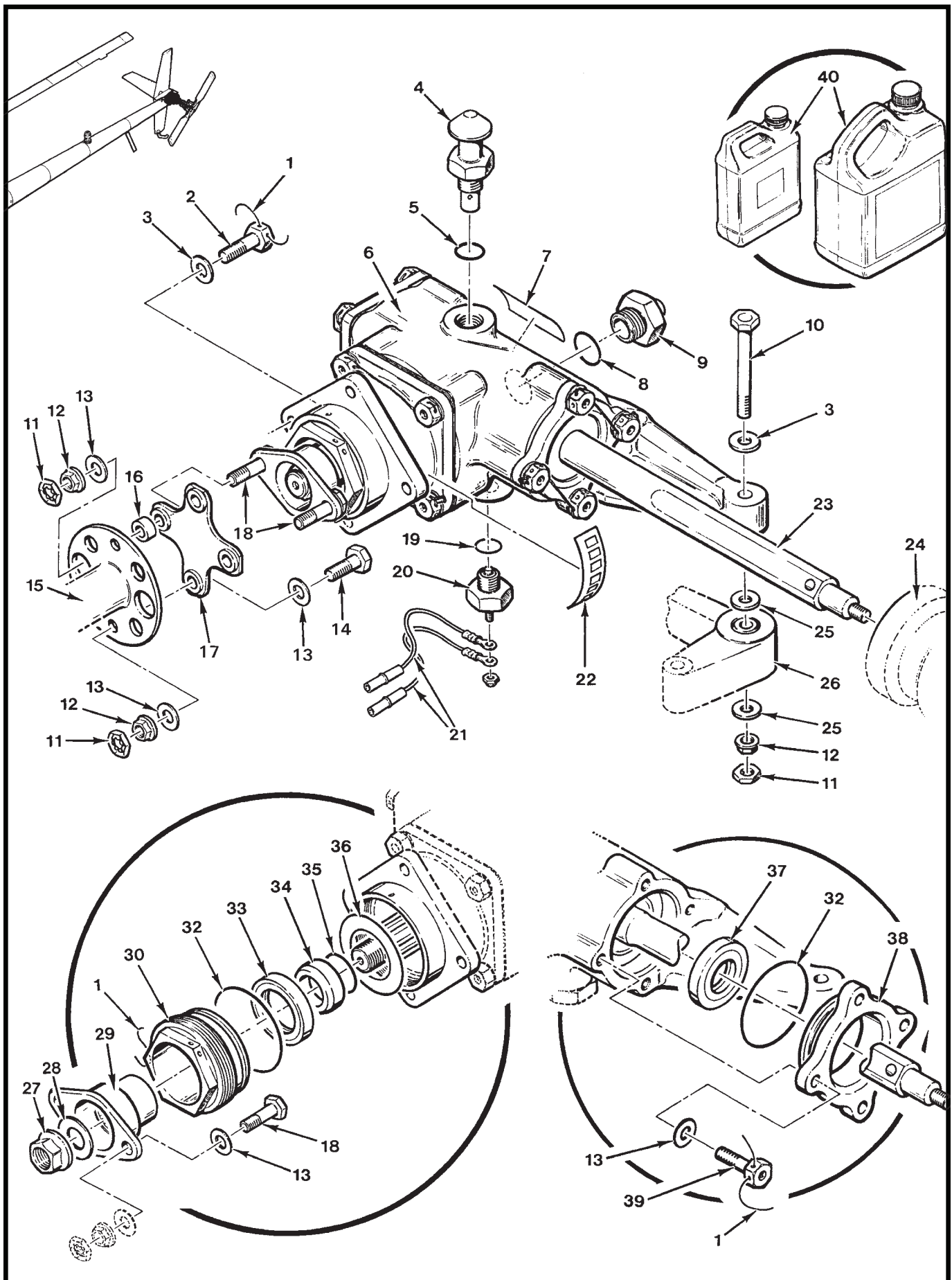


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
B021 TAIL ROTOR GEARBOX & INSTALLATION				
65-7-1	MS20995C32	0.032-inch dia Safety Wire	X	A/R
2	MS20074-04-06*	Bolt (Ref)		
3	NAS1149F0463P*	Washer (Ref)		
4	A610-1	Filler – Vent Plug	X	1
5	MS28778-5	Packing (o-ring)	X	1
6	B021-1**	Tail Rotor Gearbox Assembly (Incl items 1, 4, 5, 7 thru 9, 12, 13, 18 thru 23, 27 thru 40, and 42)	X	1
	B021-1R	Tail Rotor Gearbox Assembly (overhaul exchange)	X	1
7	A654-23	Decal (gearbox fill and oil specification)	X	1
8	MS28775-014	Packing (o-ring)	X	1
9	B563-1	Sight Gage	X	1
10	NAS6604-25*	Bolt (Ref)		
11	B330-13*	Palnut (Ref)		
12	D210-4	Nut	X	2
13	NAS1149F0432P	Washer	X	4
14	NAS6604-4*	Bolt (Ref)		
15	B224-3*	Tail Rotor Drive Shaft (Ref)		
16	A559-1*	Spacer (Ref)		
17	A947-3*	Flex Plate (Ref)		
18	NAS6604-7	Bolt	X	2
19	MS28778-4	Packing (o-ring)	X	1
20	B566-2	Chip Detector (includes nut)	X	1
21	B049-1	Wire Harness	X	2
22	F110-2	Telatemp (temperature recorder, 140° – 190°F)	X	1
23	B554-1	Output Shaft	O	1
24	A031-1*	Pitch Control (Ref)		
25	MS20002-4*	Washer	X	2
26	A120-1*	Bellcrank (Ref)		
27	D210-8	Nut (install using item 41)	X	1
28	NAS1149F0832P	Washer	X	1
29	B546-1	Yoke	X	1
30	B549-1	Retainer (install using item 31)	X	1
31	A257-9	Lubricant (anti-seize)	X	A/R
32	MS28775-131	Packing (o-ring)	X	1
33	A966-2	Seal (input)	X	1

NOTES * See Figure 65-11 for tail rotor gearbox installation.
 ** Ship S/N 3100 and subsequent.

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
B021 TAIL ROTOR GEARBOX & INSTALLATION (Cont'd)				
65-7-34	A266-2	Spacer	X	1
35	MS28775-018	Packing (o-ring)	X	1
36	A117-44	Shim (Ref)		
37	A966-4	Seal (output)	X	1
38	B552-1	Retainer	X	1
39	MS20074-04-06	Bolt (drilled head)	X	12
40	A257-2*	Oil – Gear (1 gallon)	X	A/R
	A257-2LT*	Oil – Gear (1 liter)	X	A/R
	A257-22*	Oil – Gear (1 gallon)	X	A/R
	A257-22QT*	Oil – Gear (1 quart)	X	A/R
41	B270-11	Adhesive	X	A/R
42	B545-1	Gear Set (not shown)	O	1
	B545-2	Pinion (Ref, not shown)		

NOTES * Use correct gearbox oil per R22 MM § 22-10 Part C.

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
A021 TAIL ROTOR GEARBOX & INSTALLATION				
65-11-1	A021-1 *	Tail Rotor Gearbox Assembly (Ref, no longer available; superseded by B021-1 Tail Rotor Gearbox Assembly)	O	1
2	MS20995C32	0.032 in. dia Safety Wire	X	A/R
3	B563-1	Sight Gage	X	1
4	MS35769-11	Gasket	X	1
5	A610-1	Filler – Vent Plug	X	1
6	MS35769-9	Gasket	X	1
7	A654-23	Decal (gearbox fill and oil specification)	X	1
8	F110-2	Telatemp (temperature recorder, 140° – 190°F)	X	1
9	A116-3	Input Shaft	O	1
10	A966-2	Seal	X	2
11	NAS1149F0432P	Washer	X	10
12	MS20074-04-06	Bolt (drilled head)	X	11
13	MS35769-8	Gasket	X	1
14	T102A	Chip Detector	X	1
15	B049-1	Wire Harness	X	2
16	A107-2	Output Shaft	O	1
17	D210-4	Nut	X	4
18	A141-11	Washer	X	1
19	NAS1149FN816P	Washer	X	2
20	MS27039C0806	Screw	X	2
21	A558-1	Cover – Transparent	X	1
22	A118-4	Spacer – Shim (0.020-inch thick)	X	A/R
	A118-5	Spacer – Shim (0.025-inch thick)	X	A/R
	A118-6	Spacer – Shim (0.032-inch thick)	X	A/R
23	NAS1149F0463P	Washer	X	5
24	NAS6604-8	Bolt	X	1
25	NAS6604-25	Bolt	X	1
26	NAS6604-10	Bolt	X	1
27	A120-1	Bellcrank	X	1
28	MS20002-4	Washer	X	2
29	A031-1 **	Pitch Control Assembly (Incl items 30, 31, and 36)	X	1
30	A104-4 **	Tail Rotor Pitch Bearing	O	1
31	A125-1 **	Stud	O	1

NOTES * Ship S/N 0002 thru 3099.
 ** Must be returned to RHC as an assembly for replacement.

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
A021 TAIL ROTOR GEARBOX & INSTALLATION (Cont'd)				
65-11-32	NAS1149D0416J	Shim – Washer (0.016-inch thick)	X	A/R
	A117-21	Shim – Washer (0.020-inch thick)	X	A/R
	A117-22	Shim – Washer (0.025-inch thick)	X	A/R
33	A214-3	Washer	X	1
34	B330-13	Palnut	X	3
35	A257-2*	Oil – Gear (1 gallon)	X	A/R
	A257-2LT*	Oil – Gear (1 liter)	X	A/R
	A257-22*	Oil – Gear (1 gallon)	X	A/R
	A257-22QT*	Oil – Gear (1 quart)	X	A/R
36	A647-6	Bearing – Tail Rotor Pitch Control (not shown)	O	2

NOTES * Use correct gearbox oil per R22 MM § 22-10 Part C.