

Technical

Mil Mi-171E helicopter

MI-171E CONFIGURATION

List of main components of Mi-171E helicopter

№	Designation	Description	Unit	Q-ty
1. Power plant, rotors and transmission				
1.1	BK-2500	Engine	pc	2
1.2	SAFIR 5K/G MI	Auxiliary power unit	set	1
1.3	8AMT-6820-00 -01/02	Dust protection device	set	1
1.4	BP-14	Main gearbox	pc	1
1.5	8M-1515-000	Intermediate gearbox	pc	1
1.6	8M-1517-000	Tail gearbox	pc	1
1.7	8M-1516-000	Tail rotor drive shaft	pc	1
1.8	8A-6311-00 cep.4	Fan	pc	1
1.9	8A-6314-00	Fan drive shaft	pc	1
1.10	8-1930-000 cep. 02	Main rotor hub	pc	1
1.11	8-1950-000	Swash plate	pc	1
1.12	8AT-2710-00	Main rotor blades (5 pc)	set	1
1.13	246-3904-000 cep.01	Tail rotor	pc	1
1.14	8AMT-1250-00	Vibration damper	pc	1
2. Fuel and oil systems				

2.1	ЭЦН91С	Electrically driven centrifugal pump	pc	2
2.2	463Б	Electrically driven centrifugal pump	pc	1
2.3	766300А-1-Т	Floating regulating valve	pc	1
2.4	768600МА	Shutoff valve	pc	5
2.5	610200 А	Electric magnet valve	pc	2
2.6	637000	Bypass cock	pc	1
2.7	633630	Shutoff valve	pc	1
2.8	601100-1	Drain valve	pc	2
2.9	636700А	Drain valve	pc	4
2.10	5349Т	Oil-air cooler unit	pc	2
3. Control and hydraulic system				
3.1	КАУ-115АМ	Combination control hydraulic actuator	pc	4
3.2	8Д2.966.017-2	Hydraulic filter	pc	2
3.3	ФГ11БН	Hydraulic fine filter	pc	2
3.4	ЭМТ-2М	Solenoid brake	pc	3
3.5	ГА-77В	Pressure control unit	pc	2
3.6	ГА-74М/5	Two-position valve	pc	2
3.7	ГА-192Т	Electric magnet valve	pc	6
3.8	ГА172-00-2/Т	Metering device	pc	1
3.9	НШ39М	Gear pump	pc	2
3.10	ОК-10А	Check valve	pc	4
3.11	ГА-59/1	Emergency supply valve	pc	1
3.12	МП-100М сер.2	Electric actuator	pc	2
3.13	ПР 15.875-2300-167	Chain, 67 links	pc	1
3.14	РУ-2	Handle	pc	2
3.15	СПУУ-52	Tail rotor pitch limit system	pc	1
4. Fuselage, landing gear and pneumatic system				
4.1	595Х185 модель 14	Tire of nose landing gear	pc	2
4.2	865Х280 модель 1А	Tire of main landing gear	pc	2
4.3	8А-4101-00Б-1	Shock absorber of main landing gear	pc	1
4.4	8А-4101-00Б-2	Shock absorber of main landing gear	pc	1
4.5	8А-4201-00А	Nose landing gear lever shock strut	pc	1
4.6	АК-50Т1 сер.3	Compressor	pc	1
4.7	В8БП.000	Side view glass (RH)	pc	1
4.8	В8БП.000-01	Side view glass (LH)	pc	1
4.9	К2116	Wheel without brake for tire 595*185	pc	2
4.10	КТ97-310	Wheel for tire 865*280	pc	2
4.11	КТ97-220-1	Wheel brake	pc	1
4.12	КТ97-220-2	Wheel brake	pc	1
4.13	УП25/2	Pressure relief valve	pc	1

4.14	УПОЗ/2М	Reduction accelerator	pc	1
4.15	B24-4301-100-7	Tail leg strut	pc	1
5. Firefighting, ice-protection systems, and systems of heating and ventilation				
5.1	1-4-4 хладон 114В2	Fire extinguisher	set	2
5.2	1919Т	Governing gate	pc	2
5.3	ДВ-302Т	Electric fan	pc	3
5.4	ЭВ-0,7-1640	Electric fan	pc	4
5.5	ОР1-2,0-20-30 Хладон	Hand fire extinguisher	pc	2
5.6	ССП-ФК сер.2	Fire detection system	pc	3
5.7	ТЭР-1М	Temperature governor	pc	6
5.8	АТ-8-3	Autotransformer	pc	2
5.9	ЭПК-2Т-60	Electromechanism of windshield wiper	pc	2
5.10	ПМК-21ТВ сер.3	Programming mechanism	pc	1
5.11	ТСВ36М313	Current collector	pc	1
5.12	8АТ-7420	Tail rotor current collector	pc	1
5.13	СО-121ВМ вар. "А"	Ice detector unit	pc	1
5.14	ТВ-19	Air thermometer	set	1
6. Electrical equipment units and switching equipment				
6.1	ГТ40ПЧ8В	Alternator	pc	2
6.2	РМ-355Г	Mounting frame	pc	2
6.3	БРН120Т5А-3С	Voltage control unit	pc	2
6.4	БЗУНП355Г	Protection and control unit	pc	2
6.5	БТТ40БТ	Current transformer unit	pc	2
6.6	БЧФ-208	Phase-sequence unit	pc	1
6.7	ТС310С04Б	Transformer	pc	2
6.8	ТР-115/36	Reducing transformer	pc	2
6.9	ПТС-800БМ	Three-phase static converter	pc	1
6.10	СПО-9	Single-phase static converter	pc	1
6.11	АПШ-3М	Bus switch unit	pc	2
6.12	БСГО400А	Unit	pc	1
6.13	ВУ-6Б	Rectifier	set	2
6.14	ДМР-200ВУ	Integrated device	pc	2
6.15	АПД-78А	Automatic starting control	pc	1
6.16	ШРАП-500К	Ground power supply connector	pc	1
6.17	ШРАП-400-3Ф	Ground power supply connector	pc	1
6.18	ТОТ-83	Transformer	pc	1
7. Lighting equipment				
7.1	СБК	Cabin light	pc	2
7.2	СМ-3Б-1-1	Lamp	pc	1
7.3	ТР-100/2	Regulating transformer	pc	2

7.4	САС-4-9	Alarm, warning, and caution system	set	1
7.5	ПБС-1	Dome light	pc	6
7.6	П-39	Dome light	pc	16
7.7	ФР-100	Light	pc	2
7.8	БАНО-64	Navigation light	pc	2
7.9	ХС-62	Tail navigation light	pc	1
7.10	ФПП-7М	Landing and search light	pc	3
7.11	ОПС-57	Formation lights	pc	3
7.12	ТН-115-7,5	Transformer	pc	1
7.13	С-1	Siren	pc	1
7.14	7-К-991 (ЭКСП-46)	Cassette	pc	2
7.15	7-П-662К	Missile control console	pc	2
7.16	МСЛ-3А-2С	Light beacon	pc	2

8. Engine and gearboxes control instruments

8.1	УИ1-3К (КЧ)	Indicator	pc	1
8.2	ИД-3	Inductive sensor	pc	1
8.3	ИТЭ-1Т	Tachometer	set	2
8.4	Д-1М У2	Primary converter	pc	2
8.5	ИП-21-15Н	Position indicator of moving elements	pc	1
8.6	ДС-11	Selsyn sensor	pc	1
8.7	РТ-12-6 сер.2	Temperature probe	pc	2
8.8	П-77 вар.2	Temperature probe	pc	2
8.9	ИКД27Да-220-780	Pressure measuring complex	pc	2
8.10	ИР-117МН	Mode indicator	set	1
8.11	ИТЭ-2Т	Tachometer	set	2
8.12	Д-2М У2	Primary converter	pc	2
8.13	2ИА-6	Dual measuring equipment	set	1
8.14	ИБ-500Е сер.2	Vibration indicator	set	1
8.15	УИЗ-3К (КЧ)	Indicator	pc	2
8.16	ИМД-8	Induction sensor	pc	2
8.17	П-2ТР	Oil temperature head	pc	3
8.18	УИЗ-6К (КЧ)	Indicator	pc	1
8.19	ИД-8	Inductive sensor	pc	1
8.20	ТУЭ-48	Multipurpose electrical resistance thermometer	pc	1

9. Control equipment of fuel, hydraulic, pneumatic, and electrical systems

9.1	СКЭС-2027Б	Fuel gauge sensor	set	1
9.2	СД-29А	Pressure switch	pc	3
9.3	МСТ-25А	Pressure switch	pc	1
9.4	МСТ-30А	Pressure switch	pc	1
9.5	МВУ-100К	Air gauge	pc	1

9.6	МА-60	Aircraft pressure gauge	pc	1
9.7	ВФ-0,4-150	Voltmeter	pc	1
9.8	В-1	Voltmeter	pc	1
9.9	А-2	Amperemeter	pc	3
9.10	АФ1-150	Amperemeter	pc	4
9.11	ТФ1-75.150/1А	Transformer	pc	3
9.12	ТФ1-25.50.100/1А	Transformer	pc	4
9.13	УИ1-100К (КЧ)	Indicator	pc	2
9.14	ИД-100	Inductive sensor	pc	2
10. Flight and navigation equipment				
10.1	АП-34Б сер.2	Autopilot	set	1
10.2	6С2.553.002	Compensation sensor	pc	1
10.3	БФ-34 партия А	Filter unit	pc	1
10.4	БС-34-1	Communication unit	pc	1
10.5	ТВ-45К	Thermometer	pc	1
10.6	КЗСП	IAS controller / selector	pc	1
10.7	БСГ	Ready signal unit	pc	1
10.8	АГБ-96Д-С	Gyro horizon	pc	2
10.9	АГБ-96Р-С	Gyro horizon	pc	1
10.10	ГМК-1ГЭН	Compass system	set	1
10.11	УГР-4УК сер.3	Indicator	pc	2
10.12	КИ-13КА	Liquid magnetic compass	pc	1
10.13	БКК-18	Roll monitoring unit	pc	1
10.14	СНП-1	Power supply failure switch	pc	1
10.15	ВК-53Э-РВ	Electric cut-out switch	pc	1
10.16	ВД-10ВК 2 сер.	Altimeter	pc	2
10.17	УС-450К 2 сер. (УС-450КА 2 сер.)	Air speed indicator	pc	2
10.18	ВАР-30МК сер.4	Diaphragm-type vertical speed indicator	pc	2
10.19	ПВД-6М	Pitot-static tube	pc	2
10.20	623700-3	Static pressure valve	pc	1
10.21	АЧС-1МК	Aviation watch	pc	1
11. Control equipment				
11.1	БУР-1-2 сер.2	Flight data recorder	set	1
11.2	М11А	Unit	pc	2
11.3	МП-95+/-1,5	Accelerometer	pc	1
11.4	МП-95+3-1	Overload detector	pc	1
11.5	МУ-615А сер.1	Angular motion potentiometry detector	pc	8
11.6	ДВ-15МВ сер.2	Altitude transmitter	pc	1
11.7	ДПСМ-1	IAS sensor	pc	1
11.8	МСТВ-2,5С	Heat-resistant vibration-proof pressure switch	pc	1

12. Helicopter control equipment

12.1	АРК-15М	Automatic direction finder	pc	1
12.2	А-037 исп.4	Radio altimeter	set	1
12.3	БМП сер.2	Mechanical adapting unit	pc	1

13. Radio communication equipment

13.1	ПРИМА-КВ	Radio station	set	1
13.2	Орлан -85СТ	VHF radio station (principal)	set	1
13.3	СПУ-7	Aircraft intercom	set	1
13.4	АЛМАЗ-УПМ	Voice warning/reporting system	set	1
13.5	ГСШ-А-18	Headset	set	3
13.6	П-507М	Tape recorder	pc	1

Service life limits (SLL) and Time between overhaul (TBO)

№	Item	SLL (hours/years)	TBO (hours/years)
1	Helicopter airframe	18000/30	2000/8
2	BK-2500 Engines	6000/-	2000/10
3	APU SAFIR	6000/-	3000/-
4	Tail drive shaft, Intermediate gearbox, Tail gearbox	6000/-	2000/8
5	Vibration damper	2500/24	1000/6
6	Swash plate	3000	1500/8
7	Main rotor hub	3000	1500/8
8	Main rotor blades	2000/7	-
9	Tail rotor	3000	1000/7
10	Tail rotor blades	1000/7	-
11	Fan	6500/-	1500/8
12	Fan drive shaft	3000/-	1500/8
13	Installation of hydraulic actuators	5500/30	2000/8
14	Hydraulic system hoses	6000/30	-