

TEST EQUIPMENT FOR RAM-AIR TURBINES

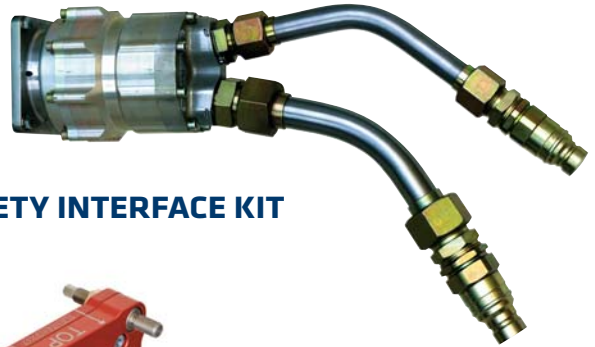
TEST EQUIPMENT RAT

>PGRAT1<



GROUND CHECK MOTOR RAT

>RATMK<



RAT SAFETY INTERFACE KIT

>RSIK1<



AIRBUS CERTIFIED

> Originally designed for

- A318,
- A320 (from S/N 1050),
- A330 - 200/300,
- A319,
- A321,
- A340 - 200/300/500/600

> Test device and RAT-Motor AIRBUS certified

- >PGRAT1< Certificate-No: D 29065, D 29066
- >RATMK< Certificate-No: D 29071, D 29072
- >RSIK1< Certificate-No: D 29057

> This test equipment is necessary to accomplish a functional test of the Ram Air Turbine (RAT)

> Compact stainless steel construction

> Storage space for RAT-Motor, cables and hoses in the test device

> Skydrol-resistant construction with sealed electrical chamber and safety glass cover plate

> RAT-Motor available in two versions

> Operation with battery / mains or aircraft supply

Test Equipment RAT >PGRAT1<

TECHNICAL DATA

> Hydraulic parameter

Measuring circuit with loading throttle

High pressure filter with mechanic contamination indication, 6 mic

Oil relief valve G 1/4"

> Measurements

Flow measurement, digital
1.3 - 40 gpm (5 - 150 lpm) Cl.1.0

Temperature indicator, analog
0 - 100 °C Cl. 1.0

Pressure indicator, analog
0 - 3600 psi (0 - 250 bar) Cl. 1.0

RAM-AIR pressure indicator, digital
0 - 4000 psi (0 - 275 bar) Cl. 0.5

RAM-AIR speed indicator, digital
0 - 9999 rpm ± 2 rpm

> Standard accessories

Hose l = 13 ft (4.0 m) with Aeroquip-Coupling with protective cap, (P/N AE 95074 N)

Hose l = 13 ft (4.0 m) with Aeroquip-Coupling with protective cap (P/N AE 94186 P)

Supply and test cable <PKL 730-1> for RAM-AIR pressure- and speed indicator and 28 V DC A/C supply

Supply cable <PKL 730-2> for 28 V DC A/C supply

Charging- and supply cable <PKL 730-3> for test equipment RAT (Range 90-260 V AC, 47 - 63 Hz)

> Dimensions and weight

Width: approx. 3 ft (920 mm)
Depth: approx. 2.9 ft (900 mm)
Height: approx. 3.9 ft (1200 mm)
Weight: approx. 540 lb (245 kg) net

Rear side



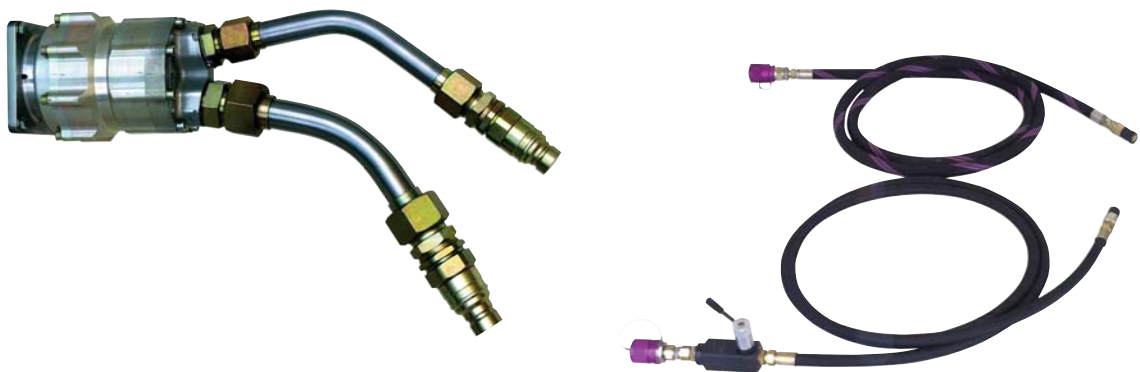
Control panel



RAT-Motor for Ground Check >RATMK<

- > This ground check motor, driven by a hydraulic ground power unit is necessary to accomplish a functional test of the Ram Air Turbine (RAT).
- > Aluminium light-weight construction
- > Storage in the drawer of the test equipment RAT >PGRAT<

Version 1: A 313165-1



Version 2: A 313165-2



Differences >RATMK< Version 1 and Version 2

- | | |
|------------|---|
| Version 1: | <ul style="list-style-type: none">> Supply and return hoses for the RAT-Motor are part of delivery> RAT-Motor is equipped with leak-free industrial couplings> Appropriate to the RAT-Motor one end of the hose is equipped with a leak-free industrial couplings, the other end is equipped with standard Aeroquip-couplings (AE 96997 M, AE 96996 P)> Supply hose with integrated flow regulator> Equivalent to RAT-Motor-Kit AGE 10600A |
| Version 2: | <ul style="list-style-type: none">> No hoses for RAT-Motor> RAT-Motor is equipped with standard Aeroquip-couplings (AE 96997 M, AE 96996 P) |

TECHNICAL DATA

> RAT-Motor, P/N GM 743 100		RAT-Motor housing connections: Inlet and outlet MS 33649-12	
Medium:	Skydrol	RAT-Motor-inlet:	MS 33656-16
Absorption capacity:	3.5 cb.in (22.30 cm ³ /U)	RAT-Motor-outlet:	MS 33656-20
Rated pressure:	3000 psi (210 bar)		
Speed:	6000 rpm	> Minimum performance data of the ground power unit	
Torque:	≥ 46 Nm at 166 bar Diff.	▶ Version 1:	
Absorption current:	max. 39 gpm (148 lpm)	Pressure:	min. 3000 psi (210 bar) with pressure regulation
Max. speed:	max. 6500 rpm at min. 267 lb/in (30 Nm)	Flow:	min. 40 gpm (150 lpm)
Inlet temperature:	-20 to +75 °C	▶ Version 2:	
Rotation:	CW	Pressure:	min. 3000 psi (210 bar) with pressure regulation
Min. load:	≥ 15 Nm at 5000 rpm	Flow:	min. 40 gpm (150 lpm) with pressure regulation
Test pressure - static:	Inlet 4500 psi (310.3 bar) Outlet and Housing 250 psi (17.3 bar)	Connections:	Supply hoses min. 20 ft (6 m)

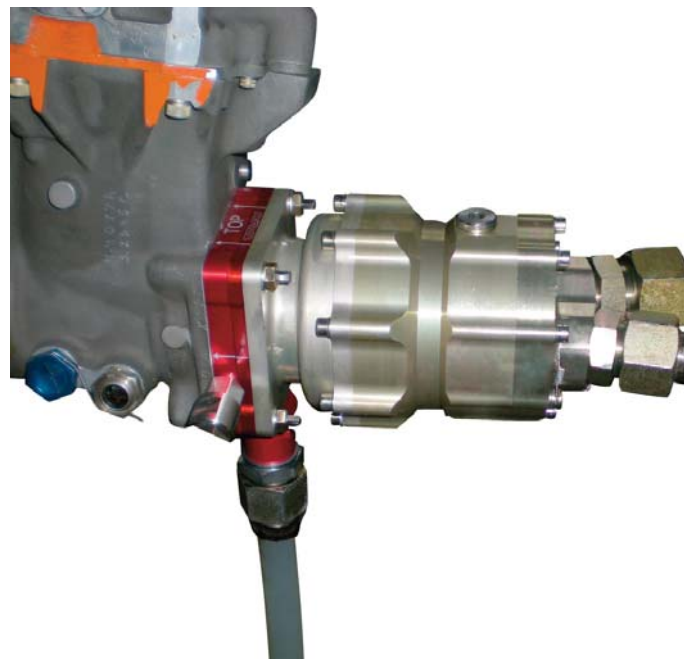
STANDARD ACCESSORIES

> Version 1: Supply hose with integrated flow regulator, l = 20 ft (6 m) Return hose, l = 20 ft (6 m) Leak-free industrial coupling for connecting the RAT-Motor Inlet coupling with protective cap, Aeroquip P/N AE 96997 M Outlet coupling with protective cap, Aeroquip P/N AE 96996 P Transport case	> Version 2: Rigid supply and return connections Inlet coupling with protective cap, Aeroquip, P/N AE 96997 M Outlet coupling with protective cap, Aeroquip, P/N AE 96996 P Transport case
Dimensions and weight Width : approx. 3.9 ft (1200 mm) Depth: approx. 2.6 ft (800 mm) Height: approx. 1.4 ft (440 mm) Weight: approx. 86 lb (39 kg) (net, without transport case)	Dimensions and weight Width: approx. 2.3 ft (700 mm) Depth : approx. 1.5 ft (450 mm) Height : approx. 0.7 ft (200 mm) Weight : approx. 26.5 lb (12 kg) (net, without transport case)

Technical data are subject to change!

RAT Safety Interface Kit

>RSIK1<



Developed to protect aircraft components from damage during RAT ground test. This damage could occur when the gasket (drive shaft seal) of the RAT Ground Check Motor fails.

The RAT Safety Interface Kit can be used in conjunction with all AIRBUS approved RAT Ground Check Motors.

- > AIRBUS approved - certificate-number: D29057
- > Intermediate flange suitable for every RAT Ground Check Motor product
- > Comes with detailed instructions
- > Scope of delivery includes rugged transport case

TECHNICAL DATA

<p>> Medium:</p> <p>SKYDROL 500-B4, SKYDROL 5 and SKYDROL LD-4 HYJET IV-4A and HYJET V</p>	<p>> Operating conditions:</p> <p>Ambient temperature: -20 to +50°C (-4 to +122°F)</p> <p>Relative humidity: 50% at 40°C (104°F) at low temperatures higher relative humidities are permitted (e.g. 90% at 20°C (68°F))</p>
<p>> Dimensions and weight of the transport case:</p> <p>Length: approx. 450mm (1.5ft) Width: approx. 280mm (0.9ft) Height: approx. 120mm (0.4ft) Weight: approx. 3kg (6.6lb)</p>	

SCOPE OF DELIVERY

POS. NO.	PIECE	DESIGNATION	PART NUMBER (TKZ)	ORDER NUMBER (TAN)
1	1	RAT SAFETY INTERFACE ADAPTER consists of:	<GM1084014>	107502290
2	1 pc.	adapter plate with AN16 connecting screw	<M1094146>	107505399
3	1 pc.	adapter pinion	<M1064267>	107501874
4	4 pcs.	attachement screws	<M1082071>	107502288
5	4 pcs.	high beams	DIN 125A 8,4	107011318
6	4 pcs.	mounting nuts	<M1091019>	107503764
7	1	conducting hose	<GM1081029>	107504197
8	1	substitute - locking spring	<M771161>	107020566
9	1	transport case	<M1094145>	107505396



Technical data are subject to change!

TYPE KEY

DESCRIPTION	TYPE KEY
Test equipment for RAM-Air Turbines, consisting of: > Test equipment RAT >PGRAT1< and RAT-Motor >RATMK< Version 1	>PGRAT1-1<
Test equipment for RAM-Air Turbines, consisting of: > Test equipment RAT >PGRAT1< and RAT-Motor >RATMK< Version 2	>PGRAT1-2<
Test equipment for RAM-Air Turbines complete, consisting of: > Test equipment RAT >PGRAT1<, RAT-Motor >RATMK< Version 1 and RAT Safety Interface Kit >RSIK1<	>PGRAT1-1-RS<
Test equipment for RAM-Air Turbines complete, consisting of: > Test equipment RAT >PGRAT1<, RAT-Motor >RATMK< Version 2 and RAT Safety Interface Kit >RSIK1<	>PGRAT1-2-RS<

safety in test > safety in flight

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