

TEST EQUIPMENT FOR RAM-AIR TURBINES

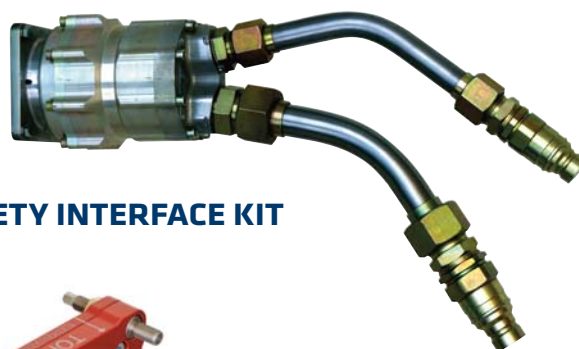
TEST EQUIPMENT RAT

>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: TEB_320-D0042 and TEB_340-D0099
- >RATMK< Certificate-No: TEB_320-D0043 and TEB_340-D0100
- >RSIK1< Certificate-No: TEB_320-D0313 and TEB_340-D0584

> ATA Chapter 29

- > 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 sealed electrical chamber
- > RAT-Motor available in two versions
- > Operation with battery or aircraft supply

Test Equipment RAT >PCRAT1<

TECHNICAL DATA

> Hydraulic parameter

Measuring circuit with loading throttle

High pressure filter with mechanic contamination indication, 6mic

Oil relief valve G 1/4"

> Measurements

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

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

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

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

RAM-AIR speed indicator, digital
0 - 9999rpm \pm 2rpm

> Standard accessories

Hose I = 157.5in (4.0m) with
Aeroquip-Coupling with protective cap,
(P/N AE 95074 N)

Hose I = 157.5in (4.0m) with
Aeroquip-Coupling with protective cap
(P/N AE 94186 P)

Supply and test cable <PKL 730-5> for
RAM-AIR pressure- and speed indicator and
28 V DC A/C supply

Charging- and supply cable <PKL 730-6> for
test equipment RAT (Range 90-260 V AC, 47 - 63Hz)

> Dimensions and weight

Width: approx. 37.4in (950mm)
Depth: approx. 33.5in (850mm)
Height: approx. 48.4in (1230mm)
Weight: approx. 485lb (220kg)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 >PGRAT1<

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)> 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

Medium:	Skydrol
Absorption capacity:	1.36cb.in (22.30cm ³ /U)
Rated pressure:	3000psi (210bar)
Speed:	6000rpm
Torque:	≥ 46Nm at 166bar Diff.
Absorption flow:	max. 39gpm (148lpm)
Max. speed:	max. 6500rpm at min. 267lb/in (30Nm)
Inlet temperature:	-20 to +75C°
Rotation:	CW
Min. load:	≥ 15Nm at 5000rpm
Test pressure - static:	Inlet 4500psi (310.3bar) Outlet and Housing 250psi (17.3bar)

RAT-Motor housing connections:	
Inlet and outlet	MS 33649-12
RAT-Motor-inlet:	MS 33656-16
RAT-Motor-outlet:	MS 33656-20

> Minimum performance data of the ground power unit

▶ Version 1:	
Pressure:	min. 3000psi (210bar) with pressure regulation
Flow:	min. 40USgpm (150lpm)
▶ Version 2:	
Pressure:	min. 3000psi (210bar) with pressure regulation
Flow:	min. 40USgpm (150lpm) with pressure regulation
Connections:	Supply hoses min. 236.2in (6m)

STANDARD ACCESSORIES

> Version 1:

Supply hose, l = 236.2in (6m)

Return hose, l = 236.2in (6m)

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

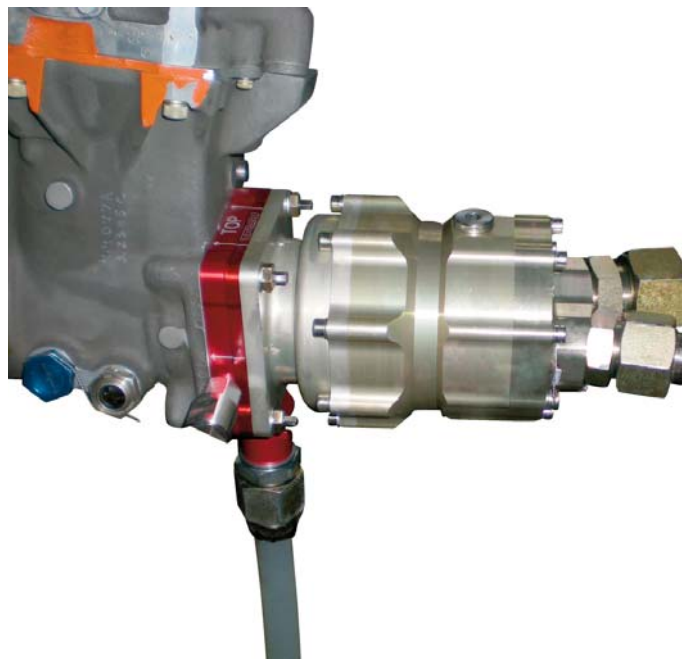
Width :	approx.	47.2in (1200mm)
Depth:	approx.	31.5in (800mm)
Height:	approx.	18.1in (460mm)
Weight:	approx.	88.6lb (40.2kg) (net, without transport case)

Dimensions and weight

Width:	approx.	27.6in (700mm)
Depth:	approx.	17.7in (450mm)
Height:	approx.	7.9in (200mm)
Weight:	approx.	26.5lb (12kg) (net, without transport case)

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-No: TEB_320-D0313 and TEB_340-D0584
- > Intermediate flange suitable for every Ground Check Motor product of the aircraft types listed above
- > 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. 470mm (18.5in) Width: approx. 420mm (16.5in) Height: approx. 220mm (8.7in) Weight: approx. 8.5kg (18.7lb)</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. attachment 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!

ACCESSORIES

DESIGNATION	PART NUMBER (TKZ)	ORDER NUMBER (TAN)
COLLECTING BIN FOR RSIK1 serves as collecting bin for possible leakage of the RAT Safety Interface Kit >RSIK1<	>ABRSIK1<	150090444



TYPE KEY

DESIGNATION	PART NUMBER
Test equipment for RAM-Air Turbines, consisting of: > Test equipment RAT >PGRAT1< and RAT-Motor >RATMK< Version 1	>A320 RAT TEST SET1< Art. No. 600000204
Test equipment for RAM-Air Turbines, consisting of: > Test equipment RAT >PGRAT1< and RAT-Motor >RATMK< Version 2	>A320 RAT TEST SET2< Art. No. 600000205
Individual parts:	
Test Equipment RAT	>PGRAT1< Art. No. 600055080
RAT Motor Version A313165-1	>RATMK VERSION 1< Art. No. 150030138
RAT Motor Version A313165-2	>RATMK VERSION 2< Art. No. 150030139
RAT Safety Interface Kit	>RSIK1< Art. No. 150090101