Fastening Assurance System

FAS3000

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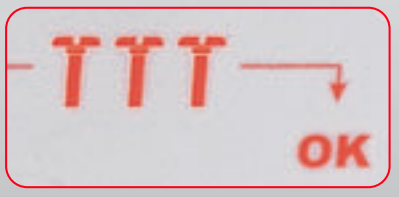
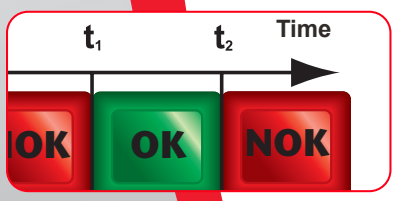




FAS3000 – Fastening Assurance System

The Chicago Pneumatic FAS3000 – Fastening Assurance System provides the ability to verify that all the fasteners in an assembly have been correctly fastened without the level of investment usually associated with assembly control systems and additional inspection.

The FAS3000 has been designed with the operator and engineer in mind and is easy to use and set up with a typical procedure comprising:

- Select measurement program.
- Rundown a number of OK screws and record data from the display.
- Enter parameters into the program via facia keypad.
- Select the run mode and the FAS3000 is now ready to use.

Features

- Automatic measurement of fastener profile for rapid set up.
- 8 programs for different fastener profiles.
- Capacity for a maximum of 250 fasteners per program.
- OK and Not OK visual indicators for each fastener.
- Audible error warning for Not OK.
- "Group Cycle Complete" visual indicator.
- Manual lockable reset switch.
- Password protection of parameters.
- 4 output sockets for interfacing with other equipment including inputs as well as output signals.
- EMC approved.

Coded error messages are shown on the LED display to quickly identify the problem with the assembly process.

The messages include:

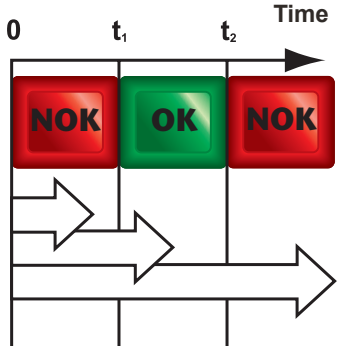
- Fastener already tightened.
- Clutch operated before minimum time.
- Clutch operated after maximum time.
- Trigger/Lever released at the same instant as the clutch operated.
- Trigger/Lever released before the clutch operated.
- Sensor failure.
- Too many fasteners tightened.

START-UP KIT to be ordered with the FAS3000			PART NUMBER
POWER CABLE AND PLUG		LENGTH	
A Mains Power Cable	Europe	2m	**396853**
B Mains Power Cable	USA	2m	**459323**
C Mains Power Cable	UK	2m	**396843**

ACCESSORIES INCLUDED	LENGTH	PART NUMBER
D Assembly transducer 2 of these are needed per unit	5m	**2050479083**

DESCRIPTION	PART NO.	DIMENSIONS LENGTH		WIDTH		HEIGHT		WEIGHT		SUPPLY VOLTAGE
		mm	in.	mm	in.	mm	in.	kg	lb.	
FAS3000	**2051466774**	317	12.5	161	6.34	87	3.42	3	6.6	AC220-240V,50Hz & AC110-120V, 60Hz

By comparing the timing of pneumatic signals from a shut off screwdriver with set parameters, the fastening cycle can be monitored and output signals generated for OK and NOK.



OPERATING SEQUENCE

t_1= Minimum time

t_2= Maximum time

Clutch operated before minimum time, lever/trigger released before minimum time.

Indicates crossed thread, screw too short, thread too short, too many washers.

Clutch operated within time limits - OK.

Clutch operated after maximum time. Screw too long, no thread in component, stripped thread, no washers on assembly.

Screwdrivers – Fastening Assurance System

0.3 to 22.1 ft.lb (0.4 to 30 Nm) - 320 to 3500 rpm

For further information please refer to the LT1409 & LT1438 Catalogues

A

B

NEW launch time mid-2003

For using C and D tools with FAS3000, please order FAS control top devices

DESCRIPTION	PART NO.
FAS Control Top Rotary Reverse	465093
FAS control Top Button Reverse	465043

C

FAS Control

D

REF	MODEL	PART NO.	TORQUE RANGE		SOUND	VIBRATION
			Nm	ft.Lb	dB(A)	m/s2
A	SCP021-T2300-FAS4Q	1461124	0.4 -2.1	0.3 -1.6	73	<2.5
A	SCP021-T1600-FAS4Q	1461134	0.4 -2.1	0.3 -1.6	73	<2.5
A	SCP043-T1100-FAS4Q	1461144	0.4 -4.0	0.3 -3.2	73	<2.5
A	SCP047-T550-FAS4Q	1461154	0.4 -4.7	0.3 -3.5	73	<2.5
T shape tools						
B	SDT023-T3500-S4Q	1465784	1.0 -2.3	0.7 -1.7	75	<2.3
B	SDT035-T2200-S4Q	1465774	1.0 -3.5	0.7 -2.6	75	<2.3
B	SDT055-T1470-S4Q	1465764	2.0 -5.5	1.9 -4.1	75	<2.3
B	SDT075-T1100-S4Q	1465754	2.5 -7.5	1.9 -5.5	75	<2.3
B	SDT100-T820-S4Q	1465744	3.5 -10.0	2.6 -7.3	75	<2.3
B	SDT140-T510-S4Q	1465734	3.5 -14.0	2.6 -10.3	75	<2.3
B	SDT160-T320-S4Q	1465724	3.5 -16.0	2.6 -11.8	75	<2.3
Straight tools						
C	SD023-LB3500-S4Q	1463094	1.0 -2.3	0.7 -1.7	73	<2.5
C	SD035-LB2200-S4Q	1463084	1.0 -3.5	0.7 -2.6	73	<2.5
C	SD055-LB1470-S4Q	1463074	2.0 -5.5	1.5 -4.1	73	<2.5
C	SD075-LB1100-S4Q	1463064	2.5 -7.5	1.9 -5.5	73	<2.5
C	SD100-LB820-S4Q	1463054	3.5 -10.0	2.6 -7.4	73	<2.5
C	SD140-LB510-S4Q	1463044	3.5 -14.0	2.6 -10.3	73	<2.5
C	SD160-LB320-S4Q	1463034	3.5 -16.0	2.6 -11.8	73	<2.5
C	SD023-LR3500-S4Q	1463024	1.0 -2.3	0.74 -1.7	73	<2.5
C	SD035-LR2200-S4Q	1463014	1.0 -3.5	0.74 -2.6	73	<2.5
C	SD055-LR1470-S4Q	1463004	2.0 -5.5	1.48 -4.1	73	<2.5
C	SD075-LR1100-S4Q	1462994	2.5 -7.5	1.85 -5.5	73	<2.5
C	SD100-LR820-S4Q	1462984	3.5 -10.0	2.58 -7.4	73	<2.5
C	SD140-LR510-S4Q	1462974	3.5 -14.0	2.58 -10.3	73	<2.5
C	SD160-LR320-S4Q	1462964	3.5 -16.0	2.58 -11.8	73	<2.5
Angle tool						
D	SD070-LB1100-S90-A4H	1463254	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB820-S90-A4H	1463244	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB510-S90-A4H	1463234	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB320-S90-A4H	1463224	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LR1100-S90-A4H	1463294	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LR820-S90-A4H	1463284	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LR510-S90-A4H	1463274	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LR320-S90-A4H	1463264	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB1100-S90-A4S	1463374	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB820-S90-A4S	1463364	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB510-S90-A4S	1463354	2.5 -7.0	1.9 -5.2	73	<2.5
D	SD070-LB320-S90-A4S	1463344	2.5 -7.0	1.6 -5.2	73	<2.5
D	SD070-LR1100-S90-A4S	1463414	2.5 -7.0	1.6 -5.2	73	<2.5
D	SD070-LR820-S90-A4S	1463404	2.5 -7.0	1.6 -5.2	73	<2.5
D	SD070-LR510-S90-A4S	1463394	2.5 -7.0	1.6 -5.2	73	<2.5
D	SD070-LR320-S90-A4S	1463384	2.5 -7.0	1.6 -5.2	73	<2.5
D	SD072-LB1080-S90-A10S	1463504	2.5 -7.2	1.6 -5.3	73	<2.5
D	SD095-LB800-S90-A10S	1463494	2.5 -7.2	1.6 -5.3	73	<2.5
D	SD130-LB600-S90-A10S	1463484	4.5 -13.0	3.3 -9.6	73	<2.5
D	SD209-LB370-S90-A10S	1463474	6.0 -20.9	4.4 -15.4	73	<2.5
D	SD300-LB250-S90-A10S	1463464	11.0 -30.0	8.1 -22.1	73	<2.5
D	SD072-LR1080-S90-A10S	1463554	2.5 -7.2	1.9 -5.3	73	<2.5
D	SD095-LR800-S90-A10S	1463544	3.0 -9.5	2.2 -7.0	73	<2.5
D	SD130-LR600-S90-A10S	1463534	4.5 -13.0	3.3 -9.6	73	<2.5
D	SD209-LR370-S90-A10S	1463524	6.0 -20.9	4.4 -15.4	73	<2.5
D	SD300-LR250-S90-A10S	1463514	11.0 -30.0	8.1 -22.1	73	<2.5

Safety Instructions

WARNING

To reduce risk of injury everyone using, installing, repairing, maintaining, changing accessories on, or working near this tool must read and understand the safety instructions before performing any such task.

All tools are designed to operate at a line pressure of 6.3 bar +/-0.15bar in accordance with ISO2787.Sound levels +/-3dB(A)*measured in accordance with ISO 15744.Vibration values*measured in accordance with ISO 8662.

*These declared values were obtained by laboratory testing in compliance with stated standards and are not adequate for risk assessments. Values measured in individual work places may be higher than the declared work places may be higher than the declared work places may be higher than the declared work places may be higher than the declared values

The actual exposure values and risk of harm experienced by an individual are unique and depend upon the way the user works,the workpiece and the work station design,as well as upon the exposure time and the physical condition of the user.We Desoutter cannot be held liable for the consequences of using declared values,instead of values reflecting the actual exposure,in an individual risk assessment in a work place situation over which we have no control.

Tools are CE marked to comply with European Machinery Directive.Specifications subject to change without prior notice. Further occupational health and safety information can be obtained from the following web sites **http://www.osha.gov (USA)http://europe.osha.eu.int (Europe).**

For further information on the general safety instructions for the operation of power toolsplease refer to the Desoutter Fastening Tools Catalogue or the tool operating instructions supplied with the tool.