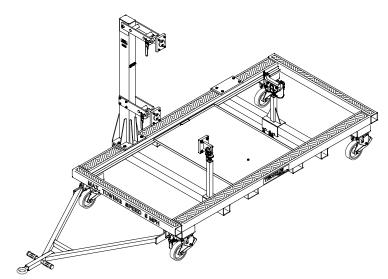


# **OPERATION & SERVICE MANUAL**



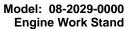
Model: 08-2029-0000 Engine Work Stand



02/1998 - Rev. 01

REVISION 01 DATE 02/1998

TEXT AFFECTED Original release





## **TABLE OF CONTENTS**

	TABLE OF CONTENTS	PAGE				
		<u>I AOL</u>				
1.0	DESCRIPTION					
2.0	USAGE					
3.0	0 SPECIFICATIONS					
4.0	ASSEMBLY INSTRUCTIONS	1				
	4.1 GENERAL INFORMATION	1				
	4.2 ASSEMBLY STEPS	1				
	4.3 PRE-USE CHECKS	1				
5.0	OPERATION	2				
6.0	MAINTENANCE	2				
-	-					



Model: 08-2029-0000 Engine Work Stand

This product can not be modified without the written approval of Tronair, Inc. Any modifications done without written approval voids all warranties and releases Tronair, Inc., its suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur.

#### 1.0 DESCRIPTION

The Tronair engine work stand incorporates the following quality features:

- Heavy duty steel construction
- Easily maneuverable
- Can be fixed into static position with rigid caster wheel brakes
- Oil pan to capture excess fluid
- Easily converted to accept left or right hand engines
- Outboard support for transporting
- Spring loaded heavy duty casters with multi-directional lockouts
- Optional work platform available

#### 2.0 USAGE

The purpose of this engine stand is to allow mechanics easy access to any part of the engine system during engine inspection and maintenance procedures. A "four-point" mounting system via front mounting pads (IP71-20-001) and rear flange (IP78-10-00) into the engine stand make access to the engine possible.

### 3.0 SPECIFICATIONS

Weight: 960 lbs.

Length: 120 in. (without towbar)

Width: 61 in. Height:  $82^{1/2}$  in.

### 4.0 ASSEMBLY INSTRUCTIONS

#### 4.1 GENERAL INFORMATION

This production should be assembled and/or repaired using good workmanship practices and proper tools.

### 4.2 ASSEMBLY STEPS

The 08-2029-0000 AE-3007-C engine stand is designed to handle either right hand or left hand mounted engines. The main support is mounted in the front end of the engine stand base for use with a right hand engine, see Figure 1. The front support and rear mounting support are reversed for left mounted engines. The outboard support arm is mounted from the front mounting pad (IP71-20-001) to the cross member of engine stand base.

- Position main support and rear support onto engine stand base at proper locations and secure with mounting hardware provided.
- For the main support, use one (1) flatwasher, one (1) lockwasher, and one (1) ½-20 grade 8 bolt at each of the eight (8) locations (see Figure 2). Screw all bolts in finger tight, and gradually torque each bolt to 85 ft-lbs. The engine stand is now ready to accept an AE-3007-C engine.

## 4.3 PRE-USE CHECKS

- Refer to the parts list and illustration attached to identify and assure that all parts are present.
- Generally check the entire unit to assure the tightness of all nuts and bolts, etc.

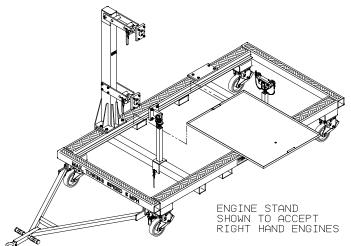
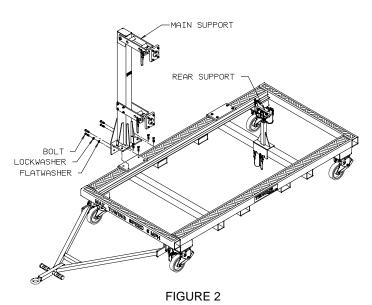


FIGURE 1





Model: 08-2029-0000 Engine Work Stand

#### 5.0 OPERATION

- Attach appropriate sling (not included with stand) to engine and remove from aircraft according to the manufacturer's instructions.
- 2. Remove the two engine mounting pads from the main support assembly of the engine stand and bolt them to appropriate front mount locations on the AE-3007-C engine.
- 3. Lock caster brakes on stand.
- 4. Align the AE-3007-C engine perpendicular with the main support assembly on the engine stand. Be sure that the front of the engine is positioned towards the main support assembly.
- 5. Carefully move engine into stand and pin engine mounts to the arms on the main support assembly. See Figure 3.

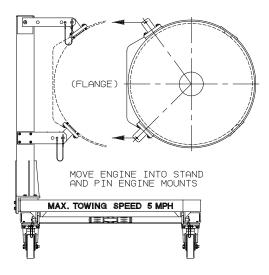


FIGURE 3

- Position rear support under the rear engine flange (IP78-10-00).
   Raise the rear support and pin in place. See Figure 4.
- 7. Remove hoist from work area.
- 8. Reverse steps 7 through 1 to remove engine.
- Attach outboard support arm by installing engine mounting pad to outboard lower engine mount on the AE-3007-C engine.
- Place outboard support over cross member and pin in place. Raise outboard support clevis and pin to engine mounting pad. See Figure 5.
- 11. 11. Extend outboard support until lightly loaded.

## 6.0 MAINTENANCE

- 1. Lubricate swivel caster bearing race with multi-purpose grease.
- 2. Lubricate all caster wheels with multi-purpose grease.
- 3. Check for wear on T-handle ball-lock pins. Replace as necessary.

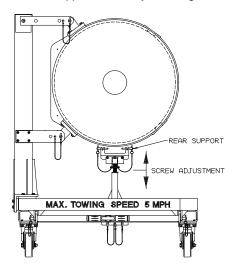


FIGURE 4

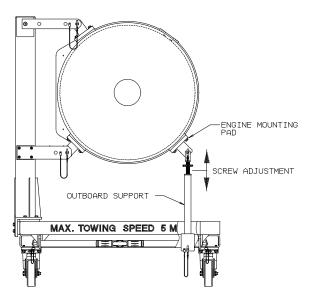
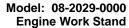
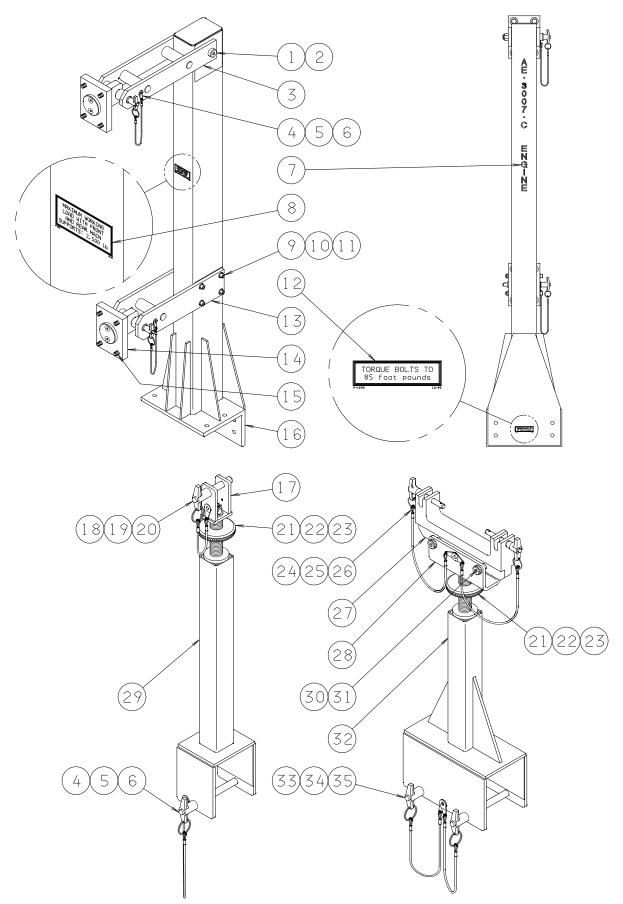


FIGURE 5





Parts List
When ordering replacement parts/kits, please specify model, serial number and color of your unit.

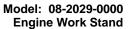




Model: 08-2029-0000 Engine Work Stand

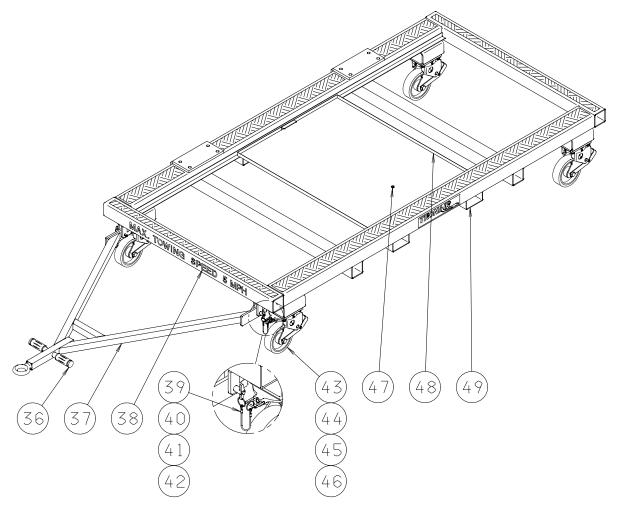
Parts List
When ordering replacement parts/kits, please specify model, serial number and color of your unit.

Item	Part Number	Description	Qty
17	Z-3663	Top Support Weldment	1
27	J-2662	Rear Mount	1
28	TS-1620	Rear Support Tube	1
30	G-1155	107220 1/2" diameter, Socket Head Shoulder Screw	2
31	G-1202-1070	3/8"-16 Elastic Stopnut	2
	K-2692	Kit, Pivot Arm; consists of:	
1		3/4" diameter, Socket Head Shoulder Screw	1
2		5/8"-11 Elastic Stopnut	1
3		Pivot Arm Weldment	1
	K-1865	Kit, Ball Lock Pin; consists of:	
4		Ball Lock T-Pin	1
5		Lanyard Assembly	1
6		1/8" diameter, Open End Steel Rivet	1
	K-2693	Kit, Engine Mount; consists of:	
14		Engine Mount Weldment	1
15		Modified Bolt	4
	K-2694	Kit, Lower Arm; consists of:	
9		3/8" diameter, Socket Head Shoulder Screw	4
10		3/8" diameter, Narrow Flatwasher	8
11		5/16"-18 Elastic Stopnut	4
13		Lower Arm Weldment	1
	K-2695	Kit, Main Post Assembly; consists of:	
7		Engine Number Label	1
8		Maximum Working Load Label	1
12		Torque Bolts Label	1
16		Main Post Weldment	1
NS		1/2"-20 Hex Head Screw, Grade 8	8
NS		1/2" diameter, Narrow Flatwasher	8
	K-2615	Kit, Ball Lock Pin; consists of:	
18		Ball Lock T-Pin	1
19	Lanyard Assembly		1
20		1/8" diameter, Open End Steel Rivet	1
	K-2698	Kit, Screw Support; consists of:	
21		Screw Support Weldment	1
22		1/2"-20 Elastic Stopnut	1
23		1/2" diameter, Narrow Flatwasher	1
	K-2699	Kit, Ball Lock Pin; consists of:	
24		Ball Lock T-Pin	2
25		Lanyard Assembly	2
26		1/8"diameter, Open End Steel Rivet	1
	K-2700	Kit, Ball Lock Pin; consists of:	
33		Ball Lock T-Pin	2
34		Lanyard Assembly	2
35		1/8" Open End Steel Rivet	1
	K-2701	Kit, Side Support Assembly; consists of:	
29		Side Support Weldment	1
• • • • • • • • • • • • • • • • • • • •		Neoprene Pad, 1/16" x 4" x 4"	3
	K-2702	Kit, Rear Support Assembly; consists of:	
32		Rear Support Weldment	1
NS		Neoprene Pad, 1/16" x 4" x 91/2"	3





Parts List
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description		
36	H-1223	Handle Grip		
38	V-1697	Maximum Towing Speed Label		
49	Z-3599	Base Assembly (Minus Items 36, 37, 39, 140, 41, 42, 47 and 48		
	K-2703	Kit, Towbar; consists of:		
36		Handle Grip		
37	37 Towbar		1	
	K-2704	Kit, Ball Lock Pin; consists of:		
39		Ball Lock T-Pin	1	
40		Lanyard Assembly	1	
41		Ferrule	1	
42		Split Retainer Ring	1	
	K-2705	Kit, Swivel Caster; consists of:		
43		Swivel Caster	1	
44		1/2"-20 Hex Head Screw		
45		1/2" diameter, Narrow Flatwasher		
46 1/2" diameter, Regular Lockwasher		1/2" diameter, Regular Lockwasher	4	
	K-2706	Kit, Oil Pan; consists of:		
47		1/4" NPT Hex Head Plug		
48		Oil Pan		



# **APPENDIX I**

**Declaration of Conformity** 



## **DECLARATION of CONFORMITY**

The design, development and manufacture is in accordance with European Community guidelines

08-2029-0000 Engine Work Stand

Relevant draft complied with by the machinery: EN ISO 12100-1

Relevant standards complied with by the machinery: EN ISO 12100-1 EN 1915-1:2001 (5.20)

Identification of person empowered to sign on behalf of the Manufacturer:

Quality Assurance Representative

Phone: (419) 866-6301 | 800-426-6301

Web: www.tronair.com

Email: sales@tronair.com