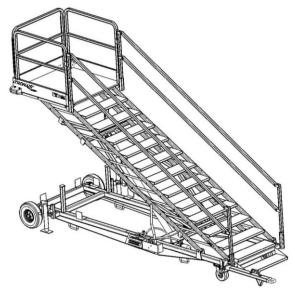


# **OPERATION & SERVICE MANUAL**



Model: 04-6001-1100 Maintenance Stand

06/2024 - Rev. 04

For Spare Parts, Operations & Service Manuals or Service Needs Scan the QR code or visit Tronair.com/aftermarket



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REVISION	DATE	TEXT AFFECTED
01	07/2008	Original Release
02	02/2010	Major Revision
03	10/2010	Added Hydraulic Pump Parts List
04	06/2024	Major revision



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Model: 04-6001-1100 Maintenance 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., it suppliers, distributors, employees, or financial institutions from any liability from consequences that may occur. Only Tronair OEM replacement parts shall be used.

# 1.0 PRODUCT INFORMATION

#### 1.1 DESCRIPTION

This manual contains instructions for operating and maintaining 04-6001-1100 Maintenance Stand. Illustrated breakdowns of all parts used in the maintenance stand are included for identification of parts and parts ordering information.

Capacity ...... 500 lbs (227 kg)

#### 1.2 MODEL & SERIAL NUMBER

Reference nameplate on unit

### 1.3 MANUFACTURER

**TRONAIR**, Inc. Telephone: (419) 866-6301 or 800-426-6301

1 Air Cargo Pkwy East Fax: (419) 867-0634
Swanton, Ohio 43558 USA E-mail: sales@tronair.com
Website: www.tronair.com

### 2.0 SAFETY INFORMATION

# 2.1 USAGE AND SAFETY INFORMATION

To ensure safe operations please read the following statements and understand their meaning. Also refer to your equipment manufacturer's manual for other important safety information. This manual contains safety precautions which are explained below. Please read carefully.



#### WARNING!

Warning is used to indicate the presence of a hazard that can cause **severe personal injury, death, and/or substantial property damage** if the Warning Notice is ignored.



### **CAUTION!**

Caution is used to indicate the presence of a hazard, which will or can cause *minor personal injury or property damage* is the Caution Notice is ignored.

# 3.0 TRAINING

### 3.1 TRAINING REQUIREMENTS

The employer of the operator is responsible for providing a training program sufficient for the safe operation of the unit.

# 3.2 TRAINING PROGRAM

The employer provided operator training program should cover safety procedures concerning use of the unit in and around the intended aircraft at the intended aircraft servicing location.

# 3.3 OPERATOR TRAINING

The operator training should provide the required training for safe operation of the unit.

NOTE: Maintenance and Trouble Shooting are to be performed by a skilled and trained technician.

# 4.0 PREPARATION FOR USE

The maintenance stand has been lubricated and adjusted at the factory and no additional preparation is required. A general inspection should be made to determine if any damage was sustained in transit. If any damage was sustained the transportation company should be notified immediately.



Model: 04-6001-1100 Maintenance Stand

# 5.0 OPERATING INSTRUCTIONS

To properly operate this stand, it is mandatory that the operating procedures listed below be read thoroughly and followed.

# 5.1 RAISING THE MAINTENANCE STAND

- Close the needle valve
- 2. Operate hydraulic pump until platform is at desired working height
- 3. Insert locking pin through cylinder rod
- 4. Move stand to desired position and lock the rear casters



#### **CAUTION!**

Always insert the lock pin through the cylinder rod after raising the platform. Always lock caster brakes after positioning stand

# 5.2 LOWERING THE MAINTENANCE STAND

- 1. Unlock the rear caster brakes
- 2. Pull the stand away from working position
- 3. Remove the lock pin from the cylinder rod
- 4. Slowly open the needle valve

# 6.0 MAINTENANCE

# 6.1 MAINTENANCE SCHEDULE

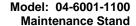
TASK	Daily	3 Months	6 Months	Annually	5 Years *
Check for loose or missing hardware. Tighten or replace before use	X				
Check frame for damage. If damage is found, stand shall be removed from service until repaired	х				
Oil pivot points - apply a few drops of oil to ungreased pivot points to prevent binding		X			
Grease pivot points - Apply EP2 lithium grease or equivalent to all major pivot points using provided zerk fittings			х		
Remove wheel hubs and repack with EP2 lithium grease or equivalent				х	
Check hydraulic level - level to be no more than 1.5" down from top of hydraulic tank with stand in lowest position. If necessary, fill with a high performance anti-wear hydraulic oil.  Tronair recommends Mobil DTE 10 Excel 15				х	
Replace hydraulic filter element				Х	
Inspect step attachment bolts for wear and/or deformation. Replace as necessary.				х	
Perform load test using 125% of rated load (600 lbs / 272 kg). See load test instructions below				Х	
Perform load test using 200% of rated load (1,000 lbs / 454 kg). See load test instructions below					X

<sup>\*</sup>and after major repairs due to damage

# 6.2 LOAD TESTING

See Maintenance Schedule for recommended load and frequency.

With platform at lowest height, place test load on the center of the platform. The load should be tethered in a way that prevents dangerous shifting of the weight in the event of failure of the stand. Observe the entire stand for any material or weld failures. If damage is found, stand shall be removed from service until repaired and retested.





# 7.0 PROVISION OF SPARES

# 7.1 SOURCE OF SPARE PARTS

Spare parts may be obtained from the manufacturer:

**TRONAIR**, Inc. Telephone: (419) 866-6301 or 800-426-6301

1 Air Cargo Pkwy East Fax: (419) 867-0634 Swanton, Ohio 43558 USA E-mail: sales@tronair.com Website: www.tronair.com

For Spare Parts, Operations & Service Manuals or Service Needs: Scan the QR code or visit Tronair.com/aftermarket

# 7.2 RECOMMENDED SPARE PARTS LISTS

Reference the following page(s) for Replacement Parts and Kits available.

Recommended Spares:

1502749 ......Filter Assembly 1505729 ......Pump Seal Kit K-2589......Cylinder Seal Kit

# 8.0 IN SERVICE SUPPORT

Contact Tronair, Inc. for technical services and information. See Section 1.3 – Manufacturer.

# 9.0 GUARANTEES/LIMITATION OF LIABILITY

Tronair products are warranted to be free of manufacturing or material defects for a period of one year after shipment to the original customer. This is solely limited to the repair or replacement of defective components. This warranty does not cover the following items:

- a) Parts required for normal maintenance
- b) Parts covered by a component manufacturers warranty
- c) Replacement parts have a 90-day warranty from date of shipment

If you have a problem that may require service, contact Tronair immediately. Do not attempt to repair or disassemble a product without first contacting Tronair, any action may affect warranty coverage. When you contact Tronair be prepared to provide the following information:

- a) Product Model Number
- b) Product Serial Number
- c) Description of the problem

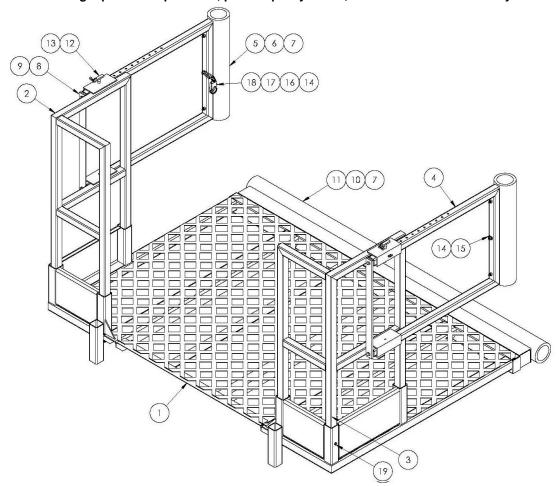
If warranty coverage is approved, either replacement parts will be sent or the product will have to be returned to Tronair for repairs. If the product is to be returned, a Return Material Authorization (RMA) number will be issued for reference purposes on any shipping documents. Failure to obtain a RMA in advance of returning an item will result in a service fee. A decision on the extent of warranty coverage on returned products is reserved pending inspection at Tronair. Any shipments to Tronair must be shipped freight prepaid. Freight costs on shipments to customers will be paid by Tronair on any warranty claims only. Any unauthorized modification of the Tronair products or use of the Tronair products in violation of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied.

The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins published or delivered by Tronair will immediately void any warranty, express or implied and Tronair disclaims any and all liability for injury (WITHOUT LIMITATION and including DEATH), loss or damage arising from or relating to such misuse.



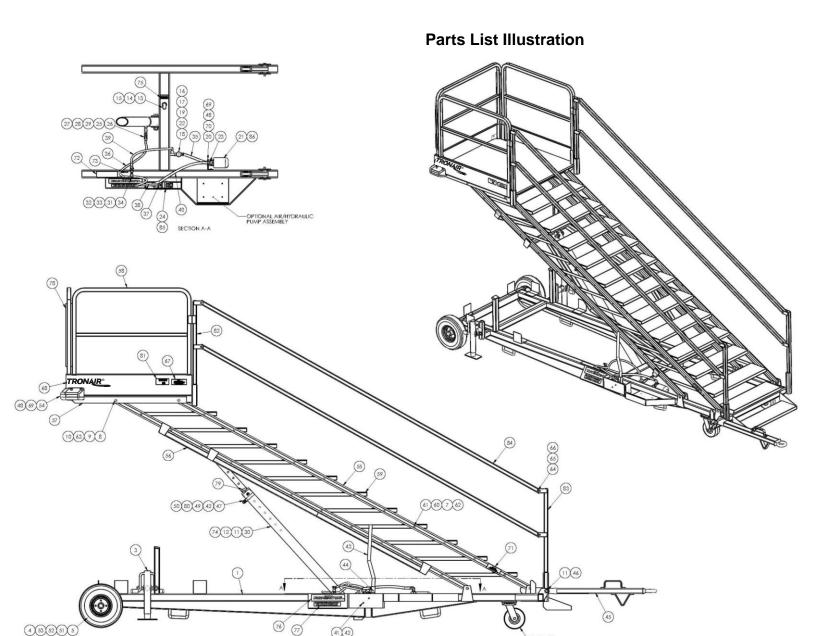


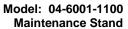
Parts List - Optional 4' x 6' Platform With Sliding Handrail When ordering replacement parts/kits, please specify model, serial number and color of your unit.



Item	Part Number	Description	Qty
1	15W5578	Platform Weldment	1
2	15W5571	Handrail LH	1
3	15W5572	Handrail RH	1
4	15W5579	Haindrail Extension	2
5	15L19565	Bumper	2
6	15W4886	Bumper Strip Weldment	2
7	150315	5/16 – 24 Nylok Nut	11
8	15L20749	Flat End Cap	2
9	1502119	3/8 – 24 x 34 LG CS	4
10	15W5141	Bumper Flat Weldment	1
11	15L20774	Bumper	1
12	1504705	Ball Lock Pin	2
13	1505325	"S" Hook	2
14	150251	5/16 Washer	2
15	15L22504	Chain	1
16	15L19522	Safety Chain	1
17	1505841	Threaded Connector	1
18	1505314	Chain Snap	1
19	1505836	1/4 x 1 Self Drilling	2



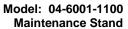






Parts List
When ordering replacement parts/kits, please specify model, serial number and color of your unit.

Item	Part Number	Description	Qty
1	15W3833	Main Frame Weldment	1
2	1504471	Caster	2
3	1504864	Jack	2
4	1504450	4, Bolt Hub	2
5	1504553	Wheel Assembly	2
6	150310	3/8 – 24 NF x 1 ¼ LG	8
7	150308	3/8 – 24 UNF Nylok Nut	52
8	150323	½ - 20 x 4 ½ LG CS	8
9	150586	½ - 20 Nylok Nut	8
10	15L14428	Lift Rail Spacer	8
11	1502546	1 Nylok Nut	3
12	1502544	1 – 14 x 5 ½ LG CS	1
13	1504189	3/8 Elbow	2
14	1503057	Bushing	3
15	1502693	Breather	1
16	1501016	3/8 x 1/4 Right Angle Male Swivel	1
17	1502057	3/8 Male Tee	1
18	1504847	3/8 Gate Valve	1
19	1502124	3/8 Close Nipple	1
20	15L21946	Oil Filter Bracket	1
21	1502749	Filter	1
22	150478	Swivel Adapter	1
23	150479	Street Elbow	2
24	1504446	Dual Acting Pump	1
25	1502243	3/8 x 1/4 Reducing Bushing	1
26	15L14446	Valve	1
27	150963	3/8 Nipple	1
28	1502418	3/8 x ½ Reducing Bushing	1
29	150897	½ x 3/8 Female Swivel	1
30	1505343	Hydraulic Cylinder	1
31	1502481	1/4 x 1/4 Female Swivel	1
32	1502995	1/4 Needle Valve	1
33	1501108	1/4 M Nipple	1
34	1503952	Service Tee	1
35	15F2166	Hose Assembly	1
36	15F1944	Hose Assembly	1
37	1504467	9/16 x 1/4 Right Angle Swivel	1
38	15F2168	Hose Assembly	1
39	15F932	Hose Assembly	1
40	15F2166	Hose Assembly	1
41	1503604	1/4 NF x 3 1/4 LG CS	2
42	150298	1/4 - 28 Nylok Nut	3
43	15L14430	Handle Pump	1



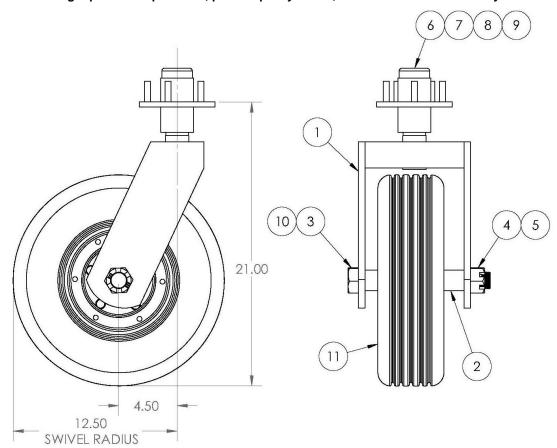


Parts List
When ordering replacement parts/kits, please specify model, serial number and color of your unit.

Item	Part Number	Description	Qty
44	150338	3/16 x 1 ½ LG Roll Pin	1
45	15W3839	Towbar Weldment	1
46	150596	1/4 x 6 LG CS	1
47	1505514	Cylinder Strap	1
48	150204	1/4 Wrought Washer	18
49	150748	¼ - 28 x 1 LG CS	1
50	15L16640	Chain	1
51	150269	1/8 x 1 ½ LG Cotter Key	2
52	1503113	3/4 - 16 NF Slotted Nut	2
53	150321	3/4 AN Washer	2
54	1503235	Corner Bumper	2
55	15W3831	Lift Rail Tube Weldment	2
56	15W3832	Lower Lift Rail Weldment	1
57	15W3838	Platform Weldment	1
58	15W3837	Safety Rail Weldment	3
59	15W3829	Step Weldment	11
60	15L14429	Step Spacer	44
61	150753	3/8 x ¾ LG CS	44
62	150246	Wrought Washer	44
63	1501424	1⁄4 - 28 45° Zerk	8
64	150736	5/16 – 24 x 2 ¾ LG	8
65	150251	5/16 Washer	16
66	150315	5/16 – 24 Nylok Nut	8
67	15L14452	Load & Height Placard	1
69	1503323	1/4 - 20 x 3/4 LG Self-Tap CS	18
70	1502552	1⁄4 - 20 x 3⁄4 LG CS	2
71	15L16864	Warning Placard	1
72	15L14436	Operate Ins. Placard	1
73	15L13489	Needle Valve Placard	1
74	1504466	1 – 14 x 4 LG CS	1
75	15L13490	Placard	2
76	1505828	Caution Placard	1
77	1505830	Warning Placard	1
78	15L17509	Sponge Rubber	4
79	1504459	Ball Pin	1
80	150303	1/4 Washer	2
81	1504099	Serial Number Label	1
82	15W3834	Top Handrail Post Weldment	2
82	15W3835	Bottom Handrail Post Weldment	2
83	15L14419	Handrail Tube	4
84	1505729	Seal Kit for 1504446 Pump	1
85	1503050	Replacement Filter Cartridge	



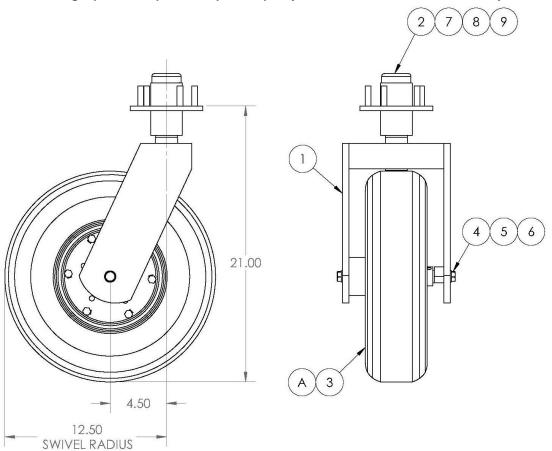
Parts List- Caster Assembly (Serial Numbers after 56400)
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



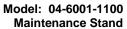
Item	Part Number	Description	Qty
1	15W5508	Caster Frame Weldment	1
2	15L22082	Spacer	2
3	15L22081	Axle Bolt	1
4	1505055	1 1/4 Slotted Nut	1
5	150318	1/4 x 1 3/4 LG Roll Pin	1
6	1504668	Hub Assy	1
7	1504722	1.015 ID AN Washer	1
8	1504399	1 – 14 Slotted Nut	1
9	1502258	1/8 x 2 LG Cotter Key	1
10	1504492	5 Bolt Hub	1
11	15F1892	Tire & Wheel Assy	1



Parts List- Caster Assembly (Serial Numbers up to 56399)
When ordering replacement parts/kits, please specify model, serial number and color of your unit.

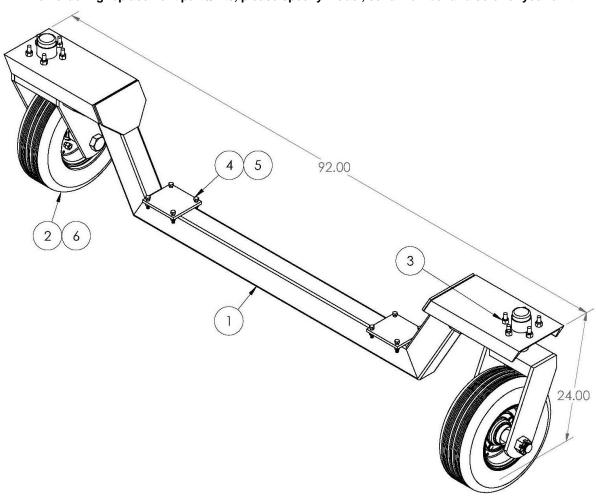


Item	Part Number	Description	Qty
1	15W4979	Caster Yoke Weld	1
2	1504668	Hub Assy	1
3	15F1893	Tire & Wheel Assy	1
4	15F2448	½ - x20 1 ¼ LG Nylok CS	2
5	150126	Lock Washer	2
6	15F2272	Axle Assy	1
7	1504722	1.015 ID AN Washer	1
8	1504399	1 – 14 Slotted Nut	1
9	1502258	1/8 x 2 LG Cotter Key	1
10	15F1892	Optional 400 x 8 Solid Tire	1





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

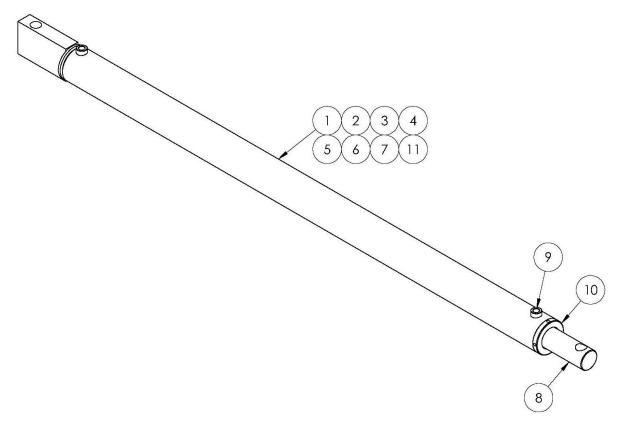


Item	Part Number	Description	Qty
1	15W5082	Caster Mount Weldment	1
2	15F2700	Caster Assy (SN after 56400)	2
3	150586	½ - 20 Nylok Nut	10
4	150337	3/8 – 24 UNF- x 1 ½ LG CS	8
5	150308	3/8 - 24 Nylok Nut	8
6	15F2448	Caster Assy (SN upt to 56399)	2

Model: 04-6001-1100 Maintenance Stand



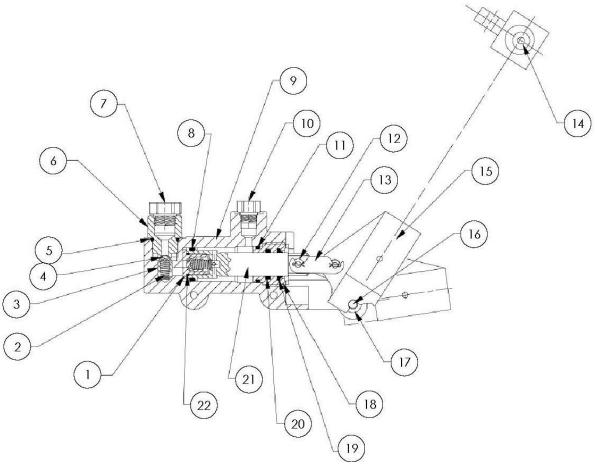
Parts List
When ordering replacement parts/kits, please specify model, serial number and color of your unit.



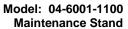
Item	Part Number	Description	Qty
1	1505365	Jacket Assy	1
2	1505359	Castle Nut	1
3	1505360	Wear Ring	1
4	1505361	Piston	1
5	1505362	Polypack	1
6	1505363	Backup Washer	1
7	1505364	O-Ring	1
8	1505366	Piston Rod	1
9	1505367	3/8 NPT Breather	1
10	1505727	Gland Nut	1
11	1505368	Rod Wiper	1
12	K-2589	Seal Kit (SA-300-200-RPK-WPB)	1



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



Item	Part Number	Description	Qty
1	1505619	Fitting, O-Ring Boss	1
2	1505620	Spring	2
3	1505621	Body Poppet	2
4	1505622	O-Ring	2
5	1505623	O-Ring	1
6	1505624	Fitting, Check Seat	1
7	1505625	Fitting, Orb Plug	1
8	1505626	O-Ring	1
9	1505627	Body, Dual Action Hand Pump	1
10	1505628	Fitting, Plug	1
11	1505629	O-Ring	1
12	1505617	Bushing, Bronze	2
13	1505618	Link, Double Pitch Chain	1
14	1505630	Screw, Set	1
15	1505631	Pivot, Handle	1
16	1505632	Pin, Hinge	1
17	1505633	Bushing, Bronze Shoulder	2
18	1505634	Nut, Gland	1
19	1505635	Wiper, Rod	1
20	1505636	O-Ring	1
21	1505637	Piston, Hand Pump	1
22	1505638	O-Ring	1





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

Item	Part Number	Description	Qty
	1505729	Seal Kit: includes;	
4	1505622	O-Ring	2
5	1505623	O-Ring	1
8	1505626	O-Ring	1
11	1505629	O-Ring	1
19	1505635	Wiper, Rod	1
20	1505636	O-Ring	1
22	1505638	O-Ring	1