

**Model: 04-6051-0000**  
**Gulfstream Universal Lift**

02/2023 – Rev. 08

**For Spare Parts, Operations & Service Manuals or Service Needs**  
**Scan the QR code or visit [Tronair.com/aftermarket](http://Tronair.com/aftermarket)**



REVISION	DATE	TEXT AFFECTED
01	04/2015	Original release
02	08/2015	Major revision
03	01/2016	Modified Name, Parts List and Option
04	04/2016	Modified Parts List
05	08/2016	Modified Parts List
06	08/2017	Modified 4.3 Filling the Reservoir and Parts List
07	10/2018	Modified 5.3 Annually
08	02/2023	Major revision

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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. Only Tronair OEM replacement parts shall be used.

## 1.0 PRODUCT INFORMATION

### 1.1 DESCRIPTION

This Tronair, Gulfstream Universal Lift, Model 04-6051-0000, is designed to aid in the installation and removal of selected aircraft parts on Gulfstream G450, G500/5000 Series, G500, G600, GV, GV-SP Aircraft.

### 1.2 MODEL & SERIAL NUMBER

Reference nameplate on unit

### 1.3 MANUFACTURER

**TRONAIR**, Inc.  
1 Air Cargo Pkwy East  
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301  
Fax: (419) 867-0634  
E-mail: sales@tronair.com  
Website: www.tronair.com

### 1.4 SPECIFICATIONS

Maximum Lift Capacity ..... 500 lbs (226 kg) (Vertical Lift)\*  
Height, Collapsed ..... 20 3/8 in (52 cm)  
Height, Extended ..... 122 in (310 cm)  
Weight ..... 486 lbs (220.5 kg)

\* Maximum lift capacity was upgraded from 250 lbs to 500 lbs. **Refer to decal on the unit to see rated capacity.**

## 2.0 SAFETY INFORMATION

### 2.1 USAGE AND SAFETY INFORMATION

To insure 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, or substantial property damage** if the warning notice is ignored.

**CAUTION!** — Caution is used to indicate the presence of a hazard that **will or can cause minor personal injury or property damage** if 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 universal lift.

### 3.2 OPERATOR TRAINING

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

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

## 4.0 OPERATING INSTRUCTIONS



### CAUTION!

Operator injury and/or component damage can result.

1. Do not transport components on this lift.
2. This lift is designed to only lift or lower components at aircraft.

### 4.1 TO RAISE LIFT ARM

1. Place Universal Lift on hard level surface.
2. Close release valve.
3. Pump jack until desired height is reached.
4. If binding occurs, lubricate linkage.

### 4.2 TO LOWER LIFT ARM

Slowly open release valve.



### CAUTION!

Component damage and/or operator injury could result if release valve is opened too quickly.

## 5.0 INSPECTION/MAINTENANCE

To keep your Tronair equipment fully operational and last for years you should adhere to the following suggestions.

### 5.1 BEFORE EACH USE

Visually inspect unit to ensure all components are present and functional

- All pivot bolts & nuts are secure
- Cylinder is free of leaks & relief valve is operational
- All casters & locks are operational
- No bent or, broken components



#### **WARNING!**

**Ensure lift components are free of damage and or excessive wear. Never use lift if any component is bent or broken**

### 5.2 PERIODIC INSPECTION

A qualified inspector shall perform a complete inspection at the following intervals

SERVICE	INTERVAL	
Normal	Yearly	Inspect equipment at site of use. Operation with various weights within the rated load limit, or uniform loads less than 65 percent of rated load.
Heavy	Semi-Annual	Inspect equipment at site of use unless external conditions indicate that disassembly should be done to permit detailed inspection. Operation within the rated load limit that exceeds normal service.
Severe	Quarterly	Inspect equipment at site of use unless external conditions indicate that disassembly should be done to permit detailed inspection. Operation at normal or heavy service under abnormal operating conditions.
Special/ Infrequent	As recommended by a qualified person before the first such use and as directed by the qualified person for any subsequent uses	

1. Visually inspect unit to ensure all components are present and functional
  - All pivot bolts & nuts are secure
  - Cylinder is free of leaks & relief valve is operational
  - All casters & locks are operational
  - No bent or, broken components
2. Lubricate lift
  - All pivot points
  - Threaded adjustment areas
3. Check cylinder reservoir level. Replenish with MIL-PRF-5606
  - Ensure Fluid is at acceptable level
  - Flush reservoir if fluid is contaminated

### 5.3 ANNUALLY

1. Visually inspect unit to ensure all components are present and functional
  - All pivot bolts & nuts are secure
  - Cylinder is free of leaks & relief valve is operational
  - All casters & locks are operational
  - No bent or, broken components
2. Ensure lift has been load certified. Check for applicable codes for requirements on annual load testing/certifications.

**It is recommended to send Equipment to Manufacturer or Authorized Service Center for Recertification.**



#### **WARNING!**

**Use safety stops behind casters. NEVER place hands/body under the lift when it is in the raised position. The lift must be in the collapsed position before performing any work to the lift.**

#### EQUIPMENT NEEDED

- Weight(s) equal to 125% rated capacity lbs

The rated capacity shall not be more than 80 percent of the maximum load sustained during the test. Test loads shall not be more than 125 percent of the rated capacity unless otherwise recommended by the manufacturer.

**5.3.1 Stand Procedure**

1. Raise and lower lift to maximum and minimum height several times
2. Ensure that the lift is free of bind and/or excessive drag
3. If bind occurs lubricate linkage
4. Apply a load equal to 125% rated capacity or equivalent to Universal lift
5. Hold for approximately two minutes
6. Visually inspect to ensure welded joints and bolted components are secure and no damage has occurred
7. Inspect for any signs of failure or fatigue

**5.3.2 Battery Tray Adapter Procedure (If Applicable)**

1. Apply a load equal to 150 lbs to battery lift
2. Raise and lower lift to maximum and minimum height several times
3. If bind occurs lubricate linkage
4. Inspect for any signs of failure or fatigue

**6.0 PROVISION OF SPARES****6.1 SOURCE OF SPARE PARTS**

Spare parts may be obtained from the manufacturer:

**TRONAIR**, Inc.

1 Air Cargo Pkwy East  
Swanton, Ohio 43558 USA

Telephone: (419) 866-6301 or 800-426-6301

Fax: (419) 867-0634

E-mail: [sales@tronair.com](mailto:sales@tronair.com)

Website: [www.tronair.com](http://www.tronair.com)

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

**6.2 RECOMMENDED SPARE PARTS LISTS**

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

**7.0 IN-SERVICE SUPPORT**

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

**8.0 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.

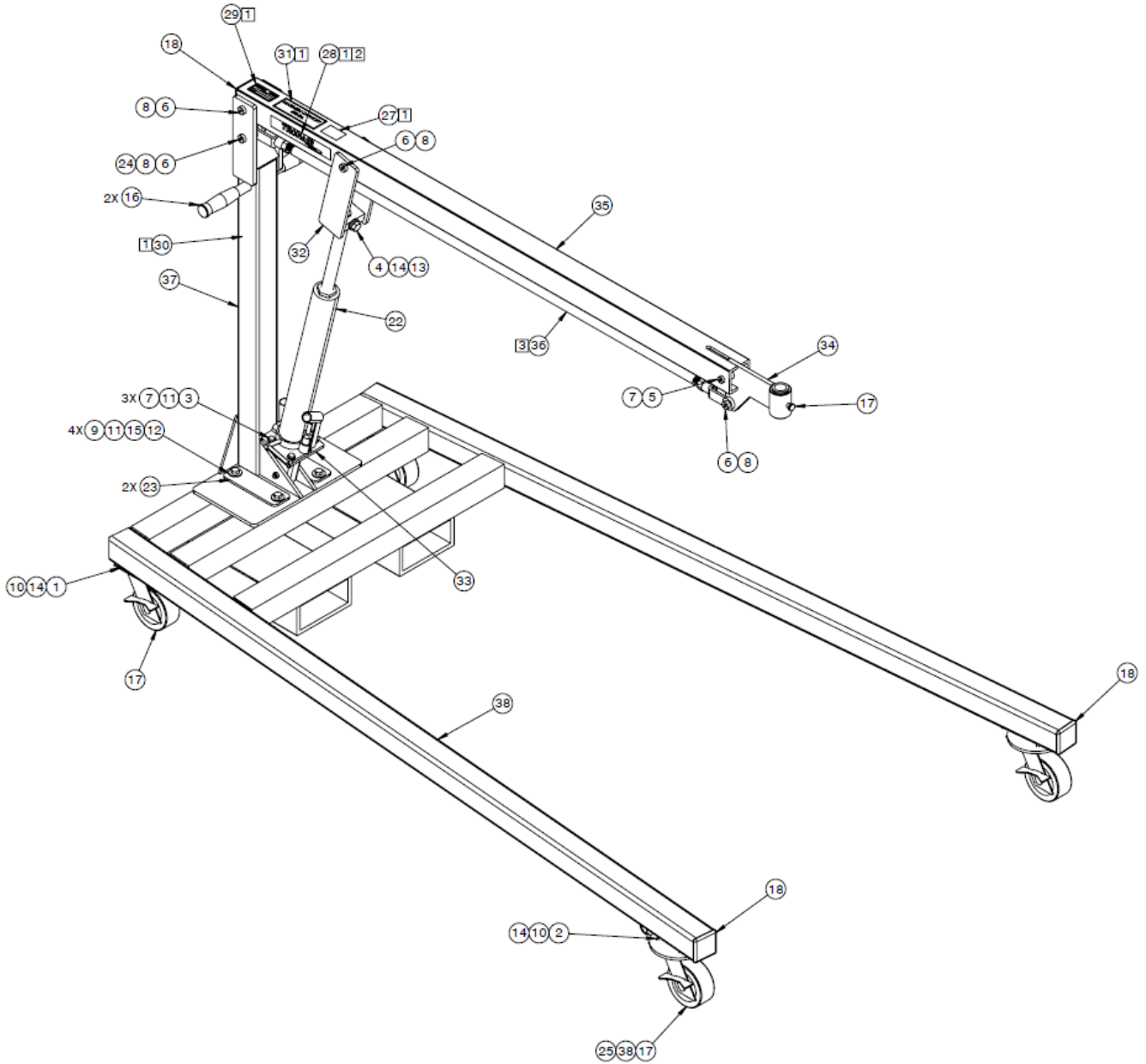
The obligations of Tronair expressly stated herein are in lieu of all other warranties or conditions expressed or implied. **Any unauthorized modification of the Tronair products or use of the Tronair products in violations of cautions and warnings in any manual (including updates) or safety bulletins 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.**



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## Parts List

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



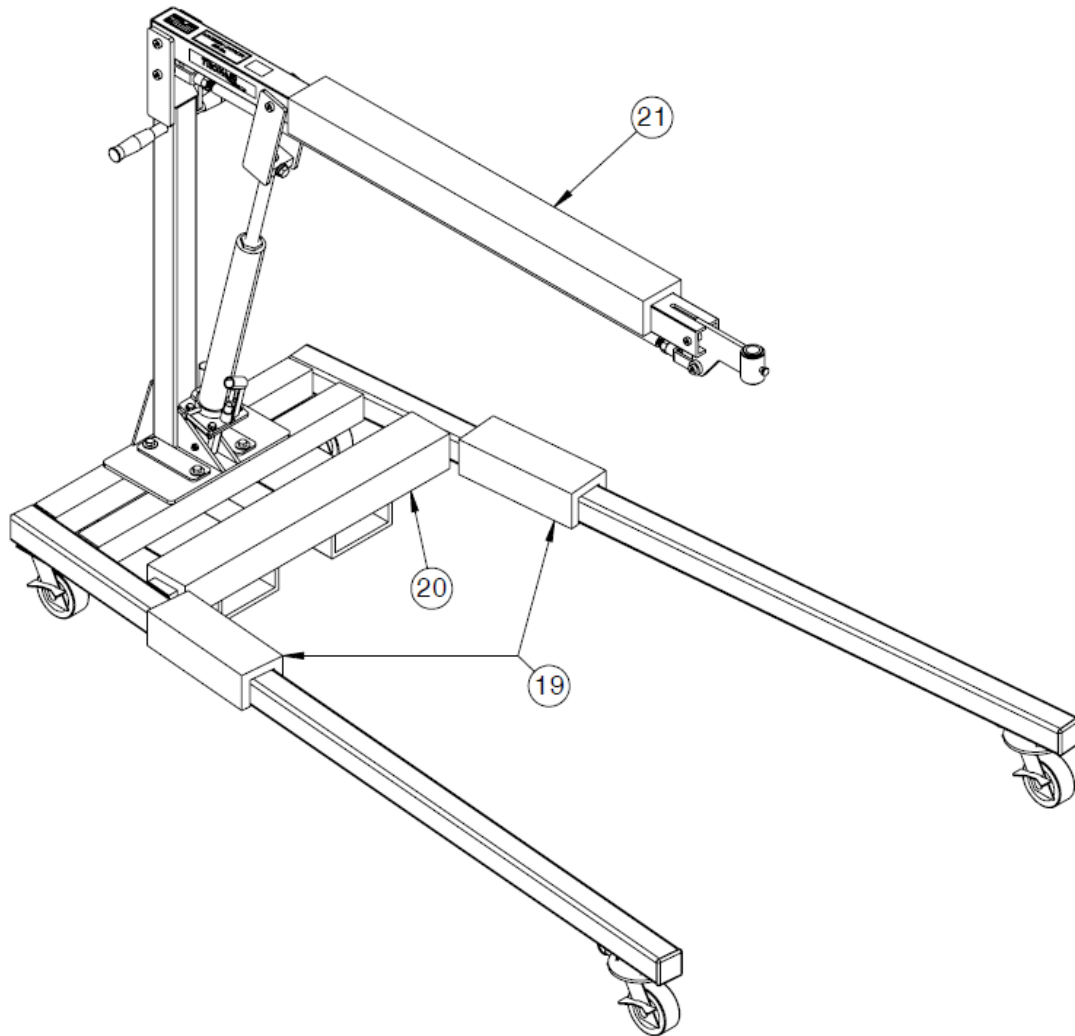
## Parts List

When ordering Replacement Parts/Kits, please specify Model & Serial Number of your product.

Item	Part Number	Description	Qty
1	G-1100-105506	BOLT, H H, GR 5, 1/4-28 X 3/4 LONG	12
2	G-1100-105510	BOLT, 1/4-28 X 1.0" LG HEX HD GR 5	4
3	G-1100-107014	BOLT, 3/8-16 X 1-1/2" HEX HD GR 5	3
4	G-1100-110026	BOLT, 5/8-11 X 2-3/4" HEX HD GR 5	1
5	G-1155-107230	SCREW, 1/2 X 3.0" LG SOCKET HD SHOULDER	2
6	G-1155-109242	SCREW, 5/8 X 4-1/4" LG SOCKET HD SHOULDER	4
7	G-1202-1070	STOPNUT, 3/8-16 ELASTIC	5
8	G-1202-1090	STOPNUT, 1/2-13 ELASTIC	4
9	G-1202-1095	STOPNUT, 1/2-20 ELASTIC	4
10	G-1250-1050W	FLATWASHER, 1/4 WIDE	16
11	G-1250-1070N	FLATWASHER, 3/8 NARROW	10
12	G-1250-1090W	FLATWASHER, 1/2 ID WIDE	4
13	G-1250-1100N	FLATWASHER, 5/8 NARROW	1
14	G-1251-1110R	LOCKWASHER, 3/4 REGULAR	17
15	G-1420-109544	BOLT, 1/2-20 X 4-1/2" HEX HD GR 8	4
16	H-1223	GRIP, HANDLE	2
17	H-1645	KNOB	1
18	H-2649-18	CAP, END (SQUARE) 3	3
19	H-3917-013.75	PADDING, ARM	2
20	H-3917-035.00	PADDING, ARM	1
21	H-3917-047.00	PADDING, ARM	1
22	HC-2572	ASSEMBLY, JACK (P)	1
23	S-4397-00	WASHER, PLATE (P)	2
24	TR417-06-000.75	TBG, 6061-T6 1.00D-.125W	2
25	U-1087	LOCK, DEMOUNTABLE SWIVEL	2
17	U-1183	CASTER, SWIVEL	4
27	V-1001	LABEL, MADE IN USA	1
28	V-1002	LABEL, TRONAIR	2
29	V-1003	LABEL, SERIAL NO.	1
30	V-1198	LABEL, TRONAIR	1
31	V-1798	LABEL, CAPACITY (500 lbs)	1
32	Z-11944-00	WELDMENT, UPPER PUMP MOUNT (P)	1
33	Z-11945-00	WELDMENT, LOWER PUMP MOUNT (P)	1
34	Z-11974	ASSEMBLY, LIFT END	1
35	Z-8649-00	WELDMENT, BEAM (P)	1
36	Z-8653	ASSEMBLY, ROD CONNECTOR	1
37	Z-8731-00	WELDMENT, POST (P)	1
38	Z-8769-00	WELDMENT, BASE (P)	1
39	INS-2006	INS, TESTING INSTRUCTION	1

## Parts List

When ordering Replacement Parts/Kits, please specify Model & Serial Number of your product.



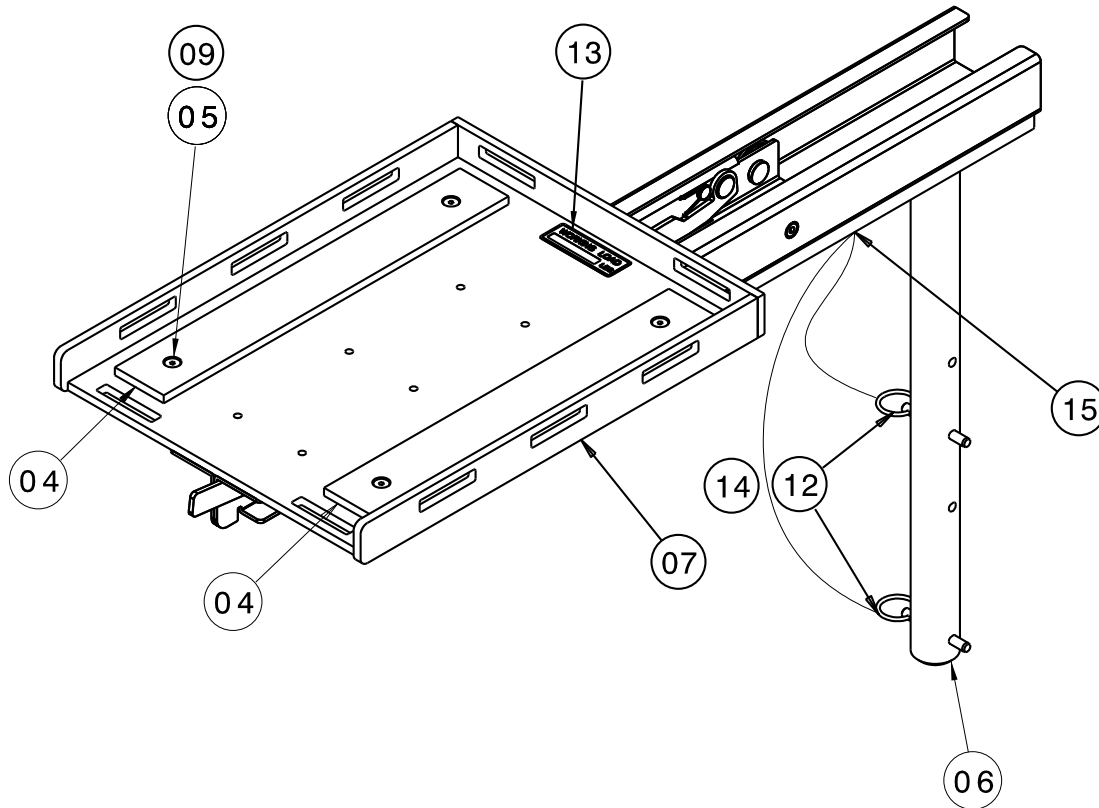
Item	Part Number	Description	Qty
19	H-3917-013.75	PADDING, ARM	2
20	H-3917-035.00	PADDING, ARM	1
21	H-3917-047.00	PADDING, ARM	1

**Parts List Optional Battery Lift Attachment**

When ordering Replacement Parts/Kits, please specify Model & Serial Number of your product.

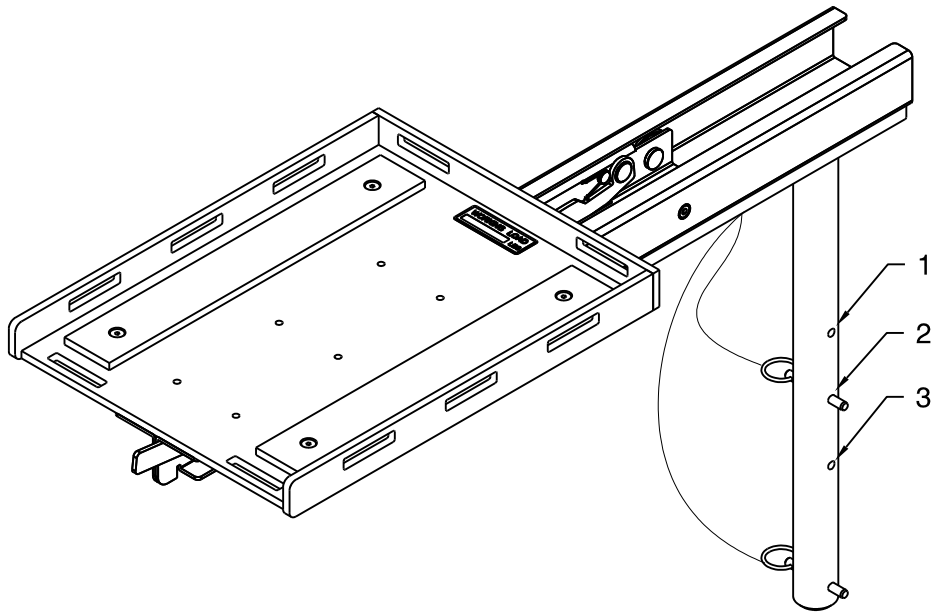
Facilitates battery installations and removal from the following Gulfstream Aircraft:

- GII – GIIB
- GIII – G350
- GIV – G450
- GV – G550
- G500 Tail Access Compartment, Forward Battery only
- G600 Tail Access Compartment, Forward Battery only
- G650 Tail Access Compartment, Forward Battery only



Item	Part Number	Description	Qty
	<b>K-5149</b>	<b>Battery Tray Assembly Kit; consists of:</b>	
4	J-5906	Strip, Wear	2
5	G-1152-103110	Screw, Socket Flat Head, #10	4
6	Z-8741-01	Weldment, Tray Support	1
7	Z-8651-01	Weldment, Battery Tray	1
9	G-1500-1030	Nut, 10 – 24 ESN	4
10	G-1152-103604	Screw, Socket Flat Head #10	6
12	G-1308-0413	Pin ¼ Diameter	2
13	V-1983	Label, Working Load 100 lbs	1
14	H-1424*18.0	Assembly, Lanyard	2
15	G-1497-103104	Screw, #10 – 32 x .375 long	1

**Optional Battery Lift Attachment Pin Positions**



Aircraft	On the Floor Pin Position	On Jacks Pin Position
G450	Position 1	Position 3
G550	Position 1	Position 3
G650	Position 1	Position 3