

# INSTALLATION & OPERATIONS MANUAL

## FlexArm B-19

**Distributed by Ergonomic Partners**

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Book Part No 360740

12/2014



REV.000

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# SAFE OPERATION: READ THIS FIRST

- **READ THE ENTIRE UNIT MANUAL BEFORE OPERATING**
- WEAR EYE PROTECTION WHEN OPERATING THIS EQUIPMENT
- DO NOT WEAR JEWELRY OR LOOSE CLOTHING WHEN OPERATING
- TIE HAIR BACK BEFORE USING MACHINE
- DO NOT WEAR GLOVES WHEN OPERATING THIS EQUIPMENT
- DO NOT USE DAMAGED, FRAYED OR DETERIORATED AIR HOSES OR FITTINGS
- KEEP HANDS CLEAR OF PINCH POINTS ON THE UNIT WHEN OPERATING
- PERIODICALLY INSPECT FOR DAMAGE, LOOSE HARDWARE OR ANYTHING IRREGULAR
- READ THE FLEXARM WARRANTY PAGE BEFORE PERFORMING ANY MAINTENANCE OR REPAIRS
- DISCONNECT THE AIR SUPPLY AND REMOVE ANY WEIGHT FROM THE ARM BEFORE MAKING ANY ADJUSTMENTS TO THE ARM OR PERFORMING ANY MAINTENANCE
- DO NOT ALTER OR MODIFY THE FLEXARM
- IT IS IMPERATIVE THAT THE TABLE OR MOUNTING SURFACE BE LAGGED TO THE FLOOR AND SECURE BEFORE INSTALLING THE FLEXARM B-19.

Failure to secure the table or mount surface could result in serious injury to the operator as well as the FlexArm.

- FlexArm is not responsible for accident or injury resulting from the misuse of this unit or for use other than originally designed and intended.
- The B-19 arm has torque and tool restrictions. See page 4 of this manual for these restrictions.

Please contact FlexArm with any questions or concerns about the installation of the FlexArm B-19 assembly arm at  
**800-837-2503.**

# FlexArm Limited Warranty

A **new** FlexArm has a 3-year limited warranty on parts and labor. This warranty does not apply to a FlexArm determined to have been misused or abused, improperly maintained, or having defects attributed to the use of non-genuine repair parts.

Air cylinders have a one-year limited warranty from the date of purchase. When replacing a cylinder, make sure not to scratch, mar, or nick the shaft or tube on either the old cylinder being replaced or the new cylinder being installed. All warranty cylinders must be returned to FlexArm for evaluation. The warranty is void if the cylinder to be evaluated shows signs of scratches or nicks on the cylinder shaft or tube. Damaged cylinders cannot be returned to the manufacturer for warranty claims.

This warranty is void if it has been determined that the FlexArm was misused, abused or improperly maintained.

FlexArm is not responsible for a customer's air quality. The unit is supplied with an auto-drain air filter but the responsibility for clean, dry air falls upon the individual shop.

**Once the original warranty expires, Arms carry a limited 60-day warranty from the date of the repair.**

For technical assistance or questions concerning the proper care and maintenance of the FlexArm unit, please contact **FlexArm at 800-837-2503**.

Rev. 7/01/14

## TORQUE AND WEIGHT LIMITATIONS

Model Number	Max Motor Torque		Working Range		Max Tool Weight	
	Ft Lbs	Nm	Inches	Cm	Lbs	Kg
B-19	100	137	1-42	3-107	35	15.9

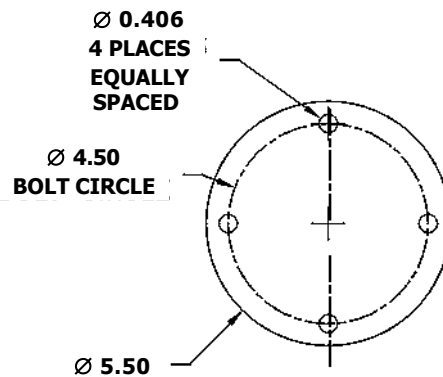
**\*\*\*Exceeding the weight and torque limitations will void the factory warranty\*\*\***

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# INSTALLATION

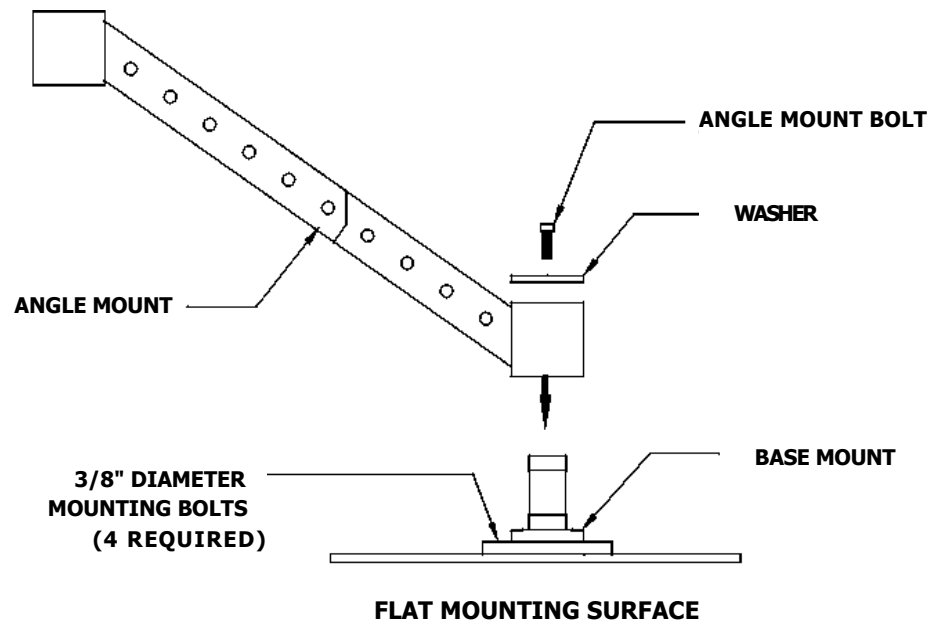
- 1) Drill and tap (4) 3/8" bolt holes on a flat, smooth table or work bench.  
(see Base Mount diagram below)

Base Mount pattern



- 2) Secure the Base Mount to the worktable. Slide the Angle Mount onto the shaft of the Base Mount and secure the angle with the washer & cap screw *before inserting the FlexArm!* The angle mount may not slide easily through both bearing sets, so make sure the angle is straight up and down and tap lightly with a rubber mallet if necessary.

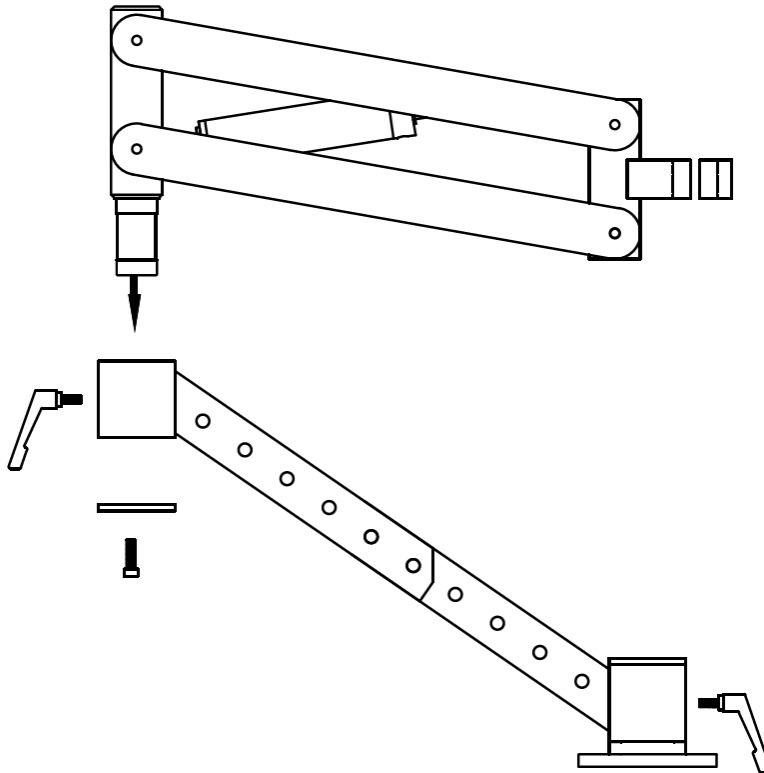
(see Angle Mount assembly diagram below)



# INSTALLATION

- 3) Insert the rear pin into the upper bore and bearing of the angle mount. The rear pin may not slide easily through both bearing sets. Use the cap screw to help pull the unit completely through the bottom bearing.

It may require two people to support the arm and guide the rear pin into the bearing sets.

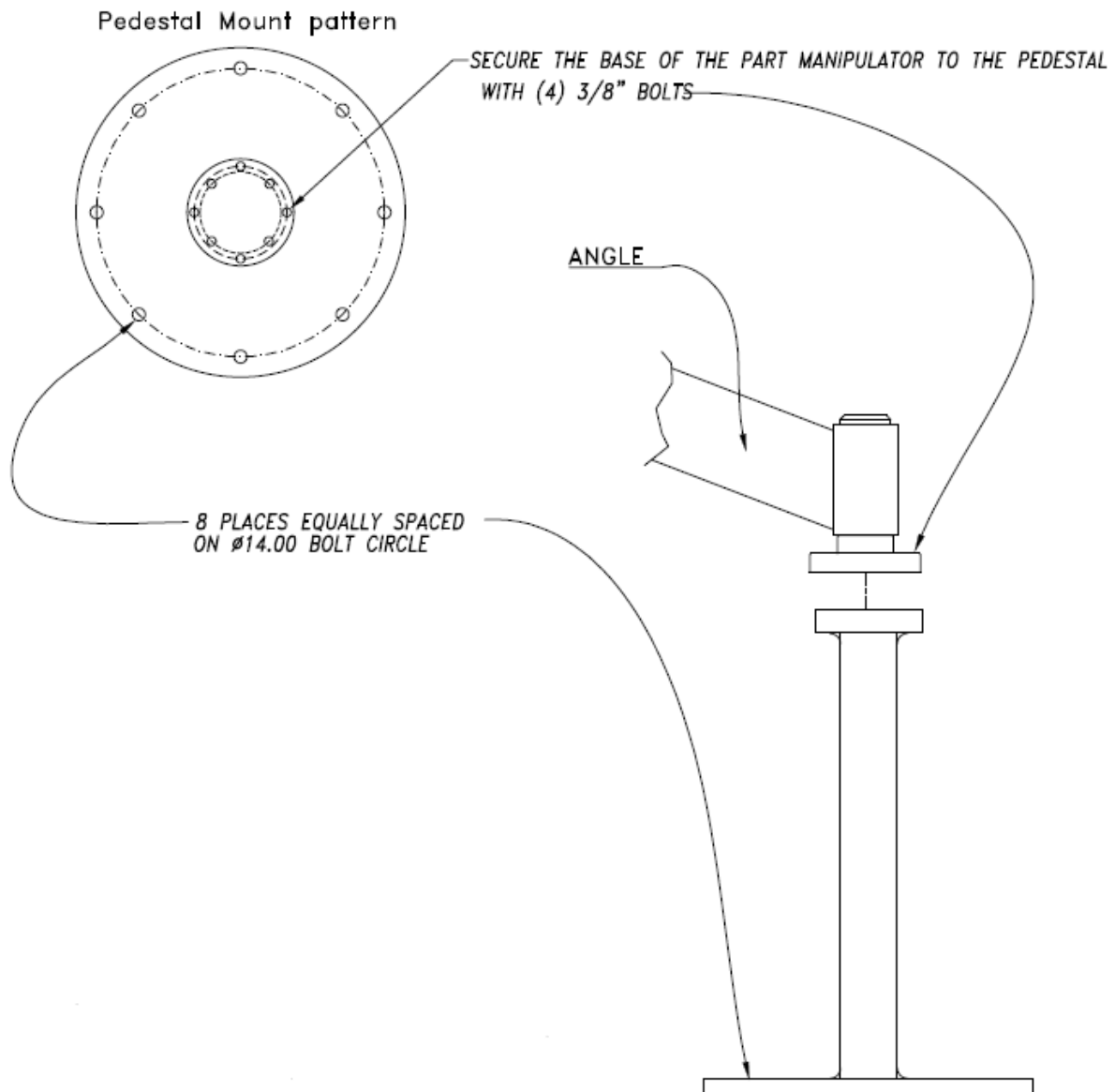


- 4) Install the levers at either end of the angle. These are for adjusting the amount of force needed to move the angle and rear pin.

Tightening the lever will increase the force needed to move the joint and loosening the lever will decrease the amount of force needed.

- 5) Check all airline connections to ensure that no hoses have come loose from the press-to-release fittings. Hoses must be completely pushed into the fittings to lock under pressure. Check the connection by gently pulling on the hose.
- 6) Install a 1/4" NPT fitting into the left (input) port of the filter assembly. It is recommended that a 3/8" ID incoming airline be used to get maximum air flow. The pneumatic system on the FlexArm will require a minimum of 90-120 psi input to perform the maximum balancing operations.
- 7) The air filter is equipped with an auto drain and will automatically remove moisture from the bowl.

# INSTALLATION WITH PEDESTAL MOUNT



- 1) Secure the pedestal to the floor with (8) 1/2" diameter wedge anchor bolts drilled a minimum of 3-3/4" into the concrete.
- 2) Secure the base of the unit to the pedestal with (4) 3/8" bolts.

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# OPERATING INSTRUCTIONS

- 1) Mount tool in the V-block assembly on the end of the B-19 assembly arm.
- 2) Check the air regulator on the rear pin of the B-19. Make sure the knob is turned completely counter-clockwise. Do not remove the knob. Ensure it is turned as far counter-clockwise as possible without removing it. **FAILURE TO DO SO COULD RESULT IN INJURY IF AIR IS CONNECTED PRIOR TO THIS STEP!**
- 3) Connect air supply to the air filter on the rear pin of the B-19 arm.  
(Air supply should be at 90-120 psi.)
- 4) Adjust air regulator clockwise until arm counterbalances the weight of the tool.
- 5) Always wear safety glasses and use proper safety precautions when operating this unit.

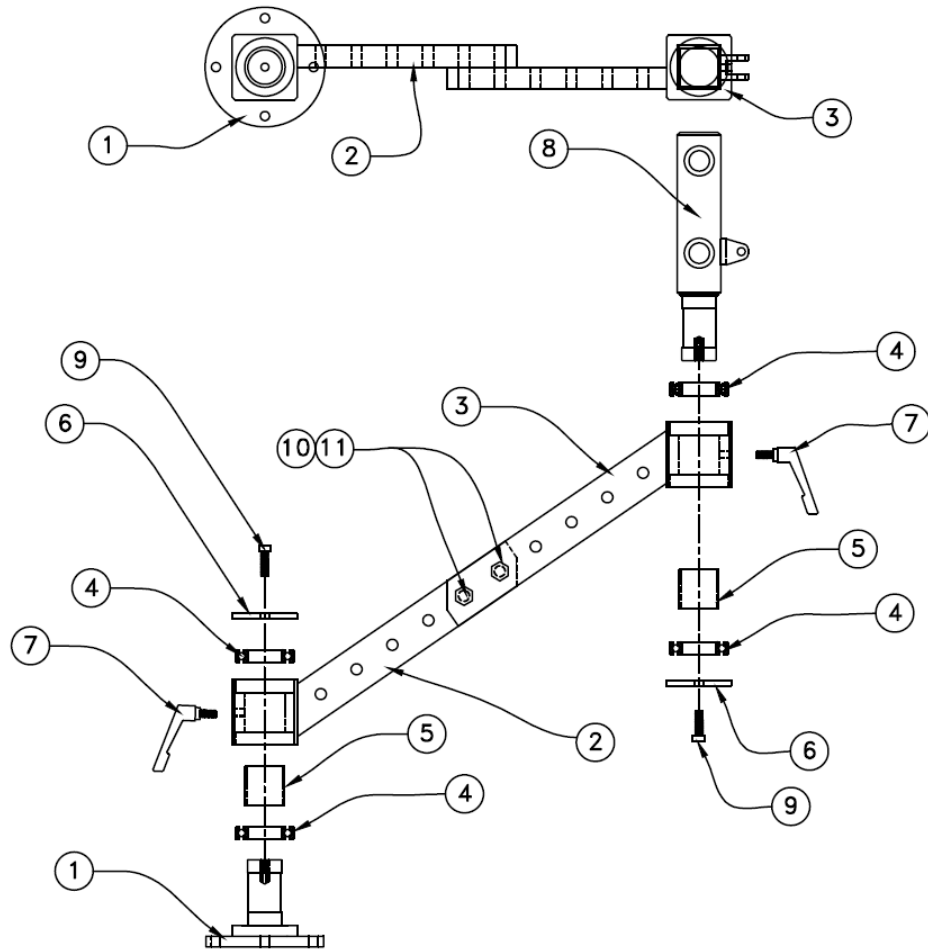
**IT IS IMPERATIVE THAT THE TABLE OR MOUNTING SURFACE BE LAGGED TO THE FLOOR AND SECURE BEFORE USING THE FLEXARM B-19.**

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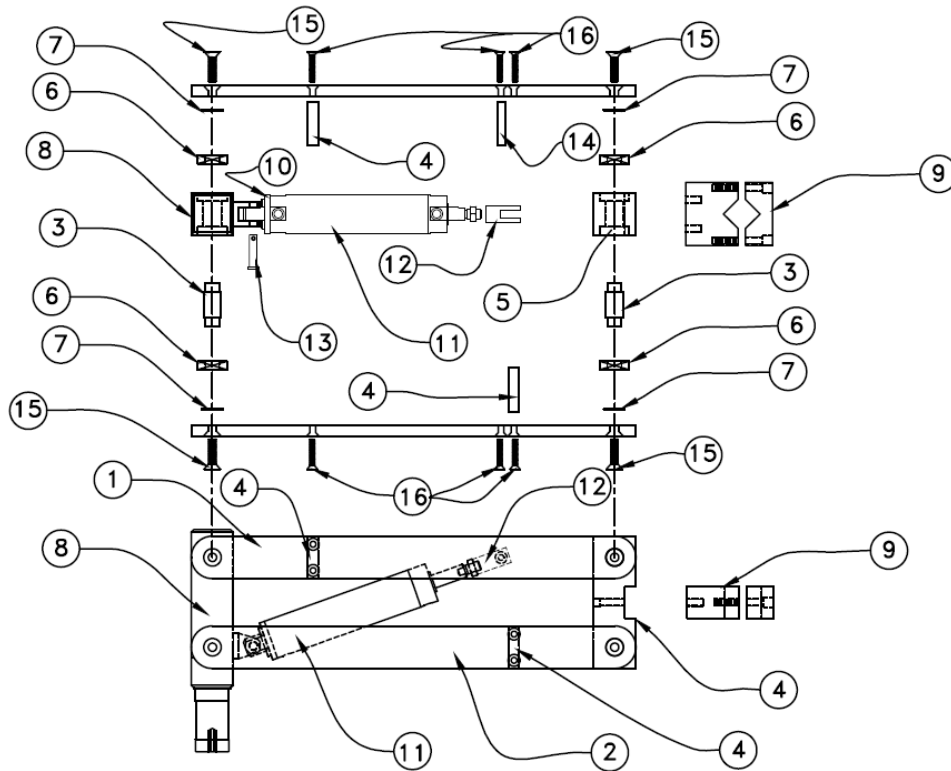
# B-19 PARTS DIAGRAM: LOWER ASSEMBLY



Item No	Part No:	Description:	QTY Used
1	360701	BASE	1
2	360703	LOWER ANGLE ASSEMBLY	1
3	360706	UPPER ANGLE ASSEMBLY	1
4	360716	BEARING	4
5	360717	SPACER	2
6	360702	ANGLE WASHER	2
7	360315	LEVER	2
8	360707	REAR PIN ASSEMBLY	1
9	0375M	SOCKET HEAD CAP SCREW 3/8-16x1	2
10	360737	HEX HEAD BOLT 1/2-13x1-1/4 GRADE 5	2
11	360738	HEX NUT 1/2-13	2

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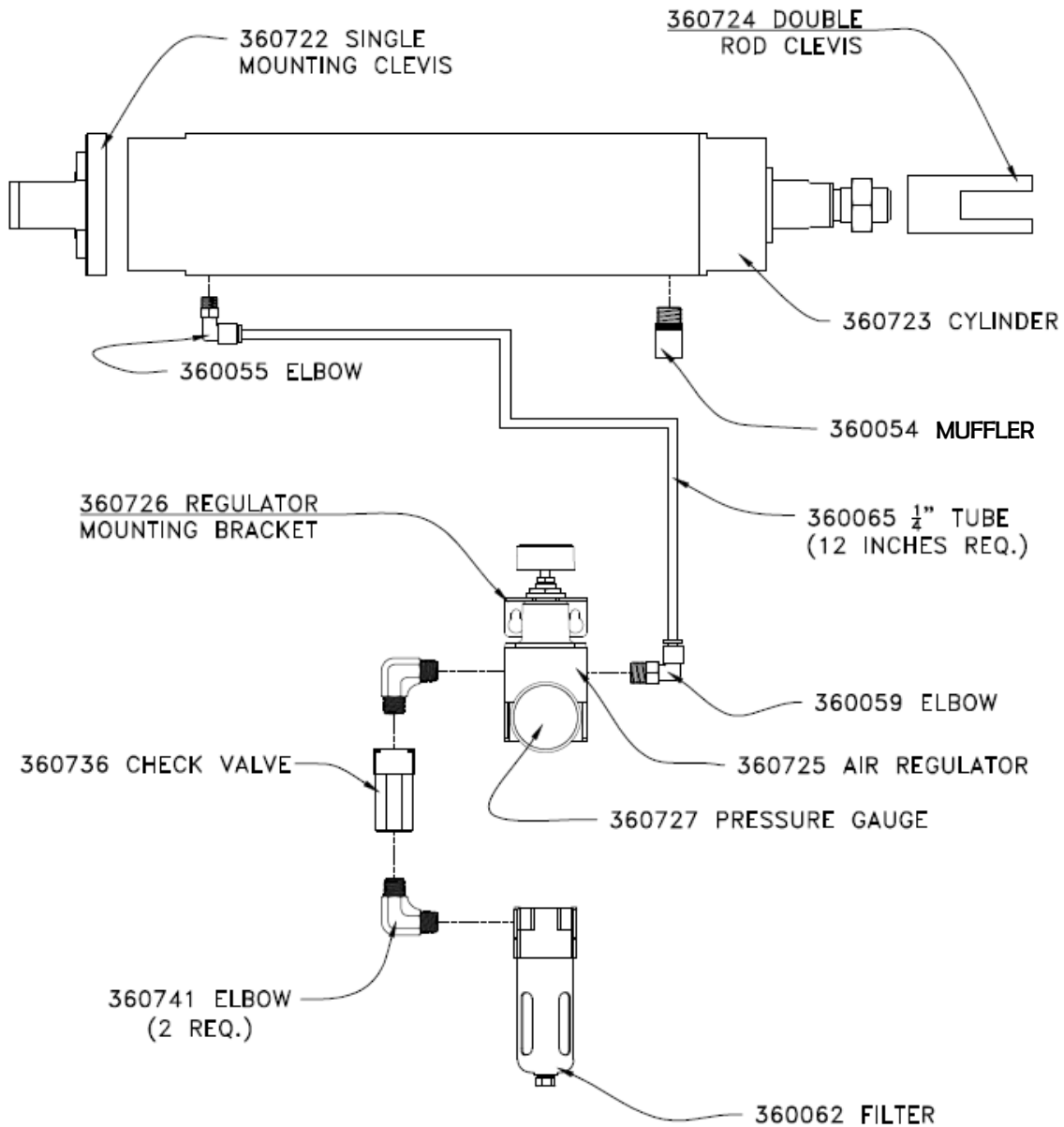
# B-19 PARTS DIAGRAM: UPPER ASSEMBLY



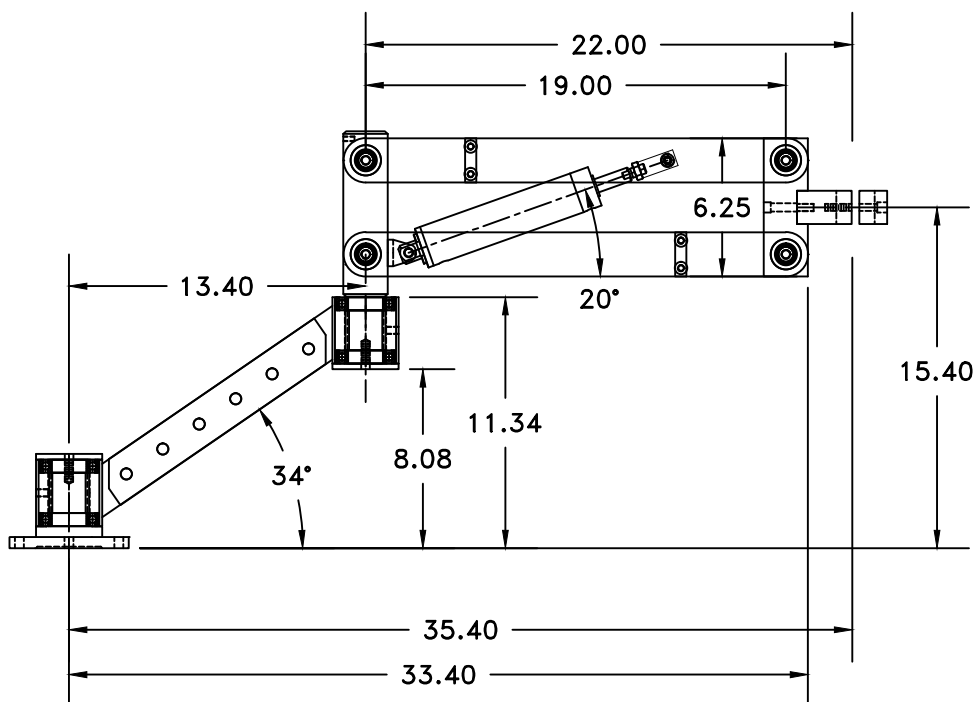
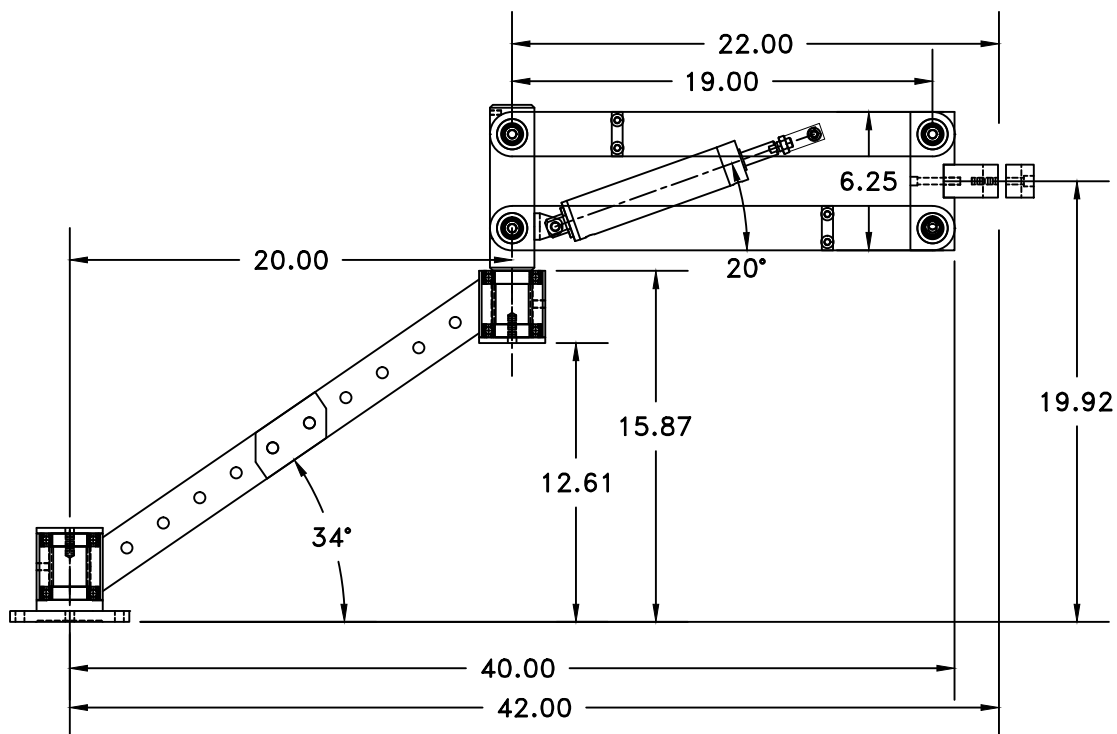
Item No	Part No:	Description:	QTY Used
1	360710	ARM UPPER	2
2	360711	ARM LOWER	2
3	360712	ARM PIN	4
4	360713	ARM SPACER BLOCK	2
5	360714	FRONT BLOCK	1
6	360715	ARM BEARING	8
7	360719	ARM SHIM	8
8	360707	REAR PIN ASSEMBLY	1
9	360739	V—BLOCK ASSEMBLY	1
10	360722	AIR CYLINDER SINGLE MOUNTING CLEVIS	1
11	360723	AIR CYLINDER	1
12	360724	DOUBLE ROD CLEVIS	1
13	360728	PIN CYLINDER BASE	1
14	360729	PIN CYLINDER ROD	1
15	360720	SOCKET DRIVE FLAT HEAD SCREW 3/8-16x1-1/4	8
16	360721	SOCKET DRIVE FLAT HEAD SCREW 1/4-20x1-1/4	10

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# PLUMBING DIAGRAM AND AIR SYSTEM PARTS



# FLEXARM B-19: RANGE OF MOTION



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