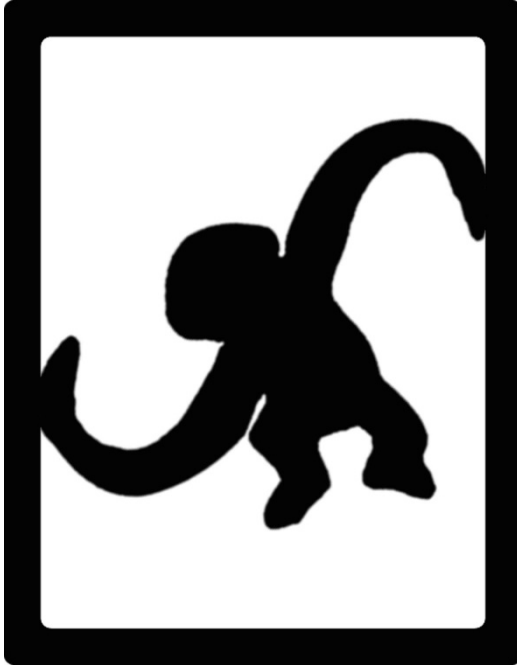


# **PUMP MANUAL**

For Models M15, M25, M50 & D50

How to Install, Use, and Care for Your New Monkey



## **MONKEY PUMPS™**

**LESS WORK – MORE MONKEY™**



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# You own a Monkey!

Congratulations! You own a Monkey! Now what?

With proper care and installation, your Monkey will be a valuable, lifelong friend. The Monkey Pump team is here to help. Call us; write us; send a smoke signal. Tell us your questions or how we can improve. We want to be your lifelong friend too.

[info@monkeypumps.com](mailto:info@monkeypumps.com)

(504) 394-7900

## Hints on Using This Manual

Items with Warnings ⚠ next to them are important. The more Warnings; the more important. You get the idea...



The manual is divided into easy to read sections. You do not need to read the manual in any particular order, but we tried to write it in a logical manner. Find the section that is most interesting to you and start there. However, you'll want to read all Warning items before using your Monkey.

## Warnings & Advice



### Major Mondo Monkey Warning!!!

Your Monkey is Strong! **Always use a Pressure Relief Valve or Pressure Safety Valve** on the discharge line of your Monkey. The check valves have arrows stamped on them. The check valve with the arrow pointing away from the Monkey is the discharge check valve. Place the pressure relief valve on the line leading from the discharge check valve. A relief valve is not included with the Monkey. You may order a relief valve from Monkey Pumps (really good idea) or another supplier (okay idea).



**Baboon Model D-50 MUST** use a **BLOCK and BLEED VALVE SETUP** on the discharge line. Air must be purged from the fluid end to pump against high pressure.

Monkey Pumps only rates these pumps to a maximum discharge pressure of 12,000 PSI. However, your Monkey can generate much higher pressures and potentially rupture lines or damage other equipment. Serious injuries may result. **THIS IS POTENTIALLY VERY DANGEROUS.** We are not saying the world might blow-up – just *your* part of the world. Have we mentioned using a pressure relief valve?



## **Really Good Monkey Advice!!**

Your Monkey is not a superhero! Monkey Pumps recommends always using:

- A chemical filter and/or Y-strainer before the suction check valve;
- A lubricator on the air/gas supply;
- A filter on the air/gas supply;

Monkeys are strong, but if trash and junk are constantly stuffed in them, they can become weak. Use the filters and lubricator to keep your Monkey healthy.

Great news! You can order the chemical filter, Y-strainer and a combination air/gas regulator/filter/lubricator directly from Monkey Pumps when you order your pump. How easy is that?

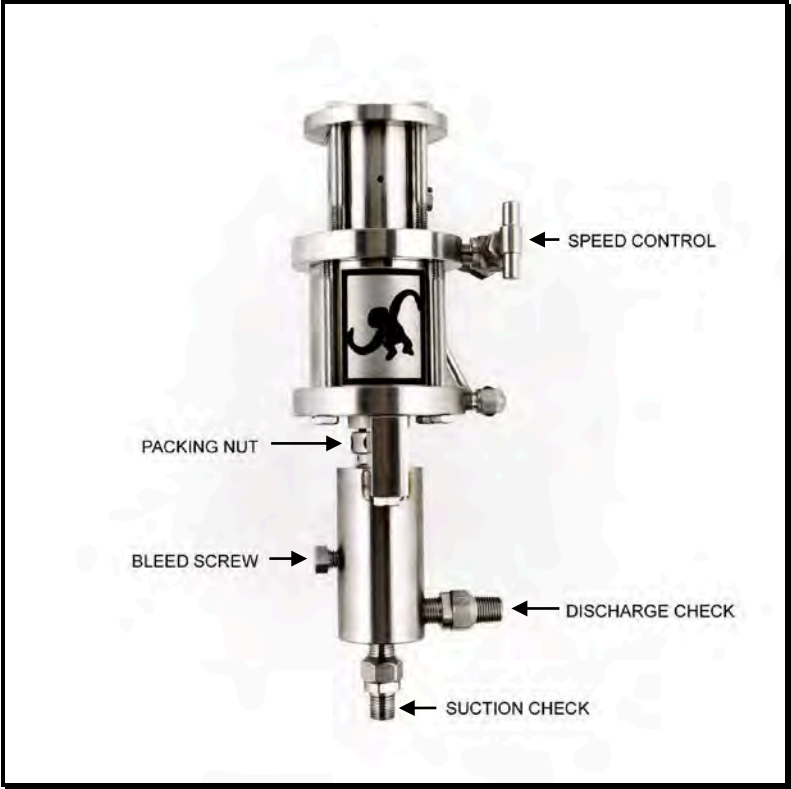


## **Check It Out**

Monkey Pump recommends placing an in-line check valve after the discharge check valve to prevent fluids and/or pressure spikes from hurting your Monkey. Protect your Monkey!

# Installing Your Monkey

## Example Pump Photo







## Common Sense Items (but we're going to list them anyway)

- Place block valves between the Monkey and the chemical tank, after the discharge check valve, and in-line on the supply. Shut off all blocks when installing or working on the Monkey for safety. **BLOCK AND BLEED VALVE VALVES MUST BE USED ON THE BABOON MODEL D-50.**
- All fittings and lines should be constructed of compatible material. Preferably 316SS or higher.
- Make sure all fittings and lines are clean before installation and during maintenance.
- All connections must be air-tight. Use Teflon tape or sealant around all fittings.
- Install a Sight Gauge or other rate gauge.

## Pump Position

The Monkey can be installed in a variety of positions. Use the following as a guide:



### Best Position

Monkey Standing Up: Suction check valve pointed down; motor pointed up (where you can read the serial number on the top cover).



### Okay Position

Monkey Lying Down: Suction check valve is parallel with the ground.



### Bad Position


Monkey Standing On Head: Your Monkey should not operate upside-down. Leaking packing could cause chemical to enter the motor requiring a motor rebuild. Gravitational advantage is lost.

Order a mounting bracket with your Monkey for easy installation!

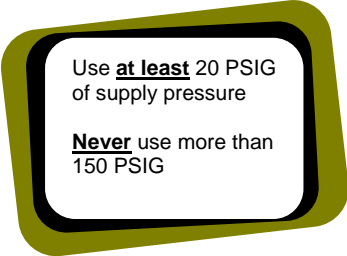
Note: Baboons are normally mounted horizontally

## Connecting Your Monkey

1. Tighten Speed Control completely.
2. Attach the Supply Line to motor inlet. Use sealant for air-tight seal.
3. Make sure you have enough supply pressure to overcome the discharge pressure. Use the amplification ratios below or consult Monkey Pumps or your distributor. Multiply the supply pressure by the amplification ratio to get the maximum discharge pressure.
4. Always use a regulator for consistent metering.
5. The Monkey requires a minimum supply pressure of 20 PSIG. **Never use supply greater than 150 PSIG.**
6. Connect the Suction Line to the Suction Check Valve. Use sealant such as Teflon tape.
7. Connect the Discharge Line to the Discharge Check Valve. Use sealant such as Teflon tape.



*Always use a regulator*



Use **at least** 20 PSIG of supply pressure

**Never** use more than 150 PSIG

Spider Monkey – Model 15					
Plunger Size	1/8"	3/16"	1/4"	3/8"	1/2"
Amplification Ratio	140	62	35	15	8
Chimp – Model 25					
Plunger Size	1/8"	3/16"	1/4"	3/8"	1/2"
Amplification Ratio	399	176	99	43	24
Orangutan – Model 50					
Plunger Size	1/2"	3/4"	1"		
Amplification Ratio	99	43	24		
Baboon – Model D 50					
Piston Size	1"	1 1/2"	2"		
Amplification Ratio	25	11.1	6.25		

Temperature Ratings	
Motor Rebuild Kits (M15, M25, M50 & D50)	-40° F to 220° F
Tuff Monkee™ Packing	-20° F to 450° F
Iron Monkee™ Packing	-20° F to 450° F

## Operating Your Monkey

1. Remember all those block valves you installed and closed? Open them.
2. Monkey Pumps recommends opening the block valves in this order:
  - a. Open the Suction Line;
  - b. Open the Discharge Line;
  - c. Open the Supply Line.
3. Slowly open the Speed Control Valve.
4. Open the Bleed Valve  $\frac{1}{4}$  to  $\frac{1}{2}$  turn. Leave open until all air bubbles are gone. Close Bleed Valve until snug. (Do not over tighten; don't be a gorilla!)
5. Watch your Sight Gauge. Keep opening the Speed Control Valve until your desired rate is achieved. Then, stop turning the valve!
6. Wow! That was so easy even a.... never mind. Go enjoy your Monkey.



Monkey Pumps always recommends using a Sight Gauge or other Rate Gauge for accurate injection rates. We know, we know. Other people have told you that you can just count the strokes. Just counting strokes does not allow for tons of variables like chemical viscosity, temperature fluctuations, cavitations, turbulence, and phases of the moon (okay, not phases of the moon, but you get the idea...) Just use a gauge. Trust us. Did we mention that you can buy a great one from Monkey Pumps!

# Caring for Your Monkey

Occasionally Monkeys get sick or just need some TLC. Feel free to call us or your authorized dealer for advice.

Following are some common conditions and suggestions:

## 1. Potty Training (Leaking Packing)

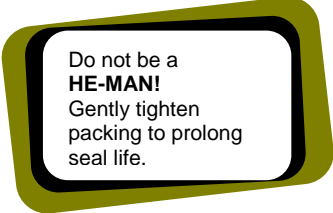
The packing on your Monkey wears over time causing a visible chemical leak. This is easy to fix. Turn the packing nut clockwise until snug – just when the leaking stops. Do not over-tighten.

If packing continues to leak, check for a scarred plunger. Replace the plunger if scarred.

A ceramic plunger is a great option. It last a lifetime and increases the life of the packing!

Replace the packing when it can no longer be tightened.

Call Monkey Pumps for your **FREE** packing nut adjuster!



Do not be a **HE-MAN!**  
Gently tighten packing to prolong seal life.

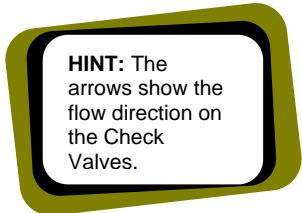
## 2. No-Flow / Weak Flow (Check Valves)

If your Monkey is pumping less chemical than previously, the Check Valves may be clogged or unable to seal.

If you are not using filters, please consider doing so. If you are, please check to see if your filter is clogged or full.

Remove the Check Valves from the pump. Disassemble and clean. Replace seals and other components if damaged or worn. Re-attach the Check Valves. Use Teflon tape or another sealant for an air-tight seal.

Make sure the Check Valves are facing the correct direction when reinstalling. The arrows point in the direction of flow.



**HINT:** The arrows show the flow direction on the Check Valves.

### 3. Wheezing & Coughing (Motor Troubles)

If motor performance degrades or if the motor is leaking air/gas, the motor may need to be rebuilt.

First, close the Speed Control Valve completely. Listen for a strong exhaust leak from the motor. (A small leak can be normal.) If no strong leak exists, the problem is most likely in the supply and you should investigate that.

If a strong leak exists, the motor needs to be rebuilt. Monkey Pumps recommends having an authorized repair center do this. However, if you are a qualified mechanic (or veterinarian), you will find the rebuild easy.

**\*\*\*FREE SHIPPING ON ALL REPAIRS TO AND FROM THE BANANA FACTORY. IT'S BANANAS!\*\*\***



## MONKEY PUMPS

### EC DECLARATION OF CONFORMITY

We: **Monkey Pumps**  
2063 Bonn St.  
Harvey, LA 70058  
+1 504.394.7900  
+1 504.394.7373 Facsimile

declare under our sole responsibility that the products,

**Pneumatically-powered Piston Pump**  
**Model 15 (Spider Monkey), Model 25 (Chimp), Model 50 (Orangutan), Model D-50 (Baboon)**  
**Including variants of these models with "Zero Emissions" differential pressure drive motor**

to which this documentation relates, are in conformity with the following documents:

Directive: **ATEX Directive 2014/34/EU**  
According to Annex VIII, "Internal Control of Production"

Standards: **EN 13463-1:2009**  
Non-electrical Apparatus for Potentially Explosive Atmospheres  
**EN 13463-5:2003**  
Part 5: Protection by constructional safety "c"



II 2 G c II 135°C (T4) -20°C<Ta<70°C

**Statement Relating to Pressure Equipment Directive – 2014/68/EU**

Under exclusion of Article 1, Section 2(j)

Dimensioning, choice of material and manufacturing rules are based primarily on requirements for sufficient strength, rigidity and stability to meet the static and dynamic operational effects or other operational characteristics and for which pressure is not a significant design factor

The technical files are maintained at:

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Ray Guccione  
President

Date of Issue: June 15, 2017

Place of Issue: Harvey, LA 70058 USA