

**Sponge-Jet® Sponge Blasting System™**

# **Sponge-Jet Media Recycler™ User Manual**

**Model:**

**35P**

**35P-CE**

**50P**

**50P-CE**



**Headquarters/Manufactured By:**

**Sponge-Jet, Inc. (USA)**

**14 Patterson Lane, Newington, NH 03801**

**1-603-610-7950 / [www.spongejet.com](http://www.spongejet.com)**

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**IMPORTANT NOTE:** While parts, systems, components, operational procedures may be the same between equipment models, the images provided in this manual may vary from model to model.

This manual represents the following models and their approximate working capacity:

Model:

35P

35P-CE

50E

50P-CE

English Language is Original Instructions.

Translated from Original Instructions.

# 1.0 Introduction

## Basic Components



1. Hopper
2. Main Rim
3. Vibratory Section
4. Safety Skirt
5. Large Particle Downspout
6. Pan Clamp Hook
7. Pan Clamp
8. Reusable Media Downspout
9. Fine Particle Downspout
10. Pressure Gauge
11. Air Inlet Valve
12. Lubricator
13. Regulator
14. Air Filter
15. Supply Line Connection
16. Bracket
17. Muffler
18. Motor



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## 2.0 Safety Checklist

- The Sponge-Jet Inc. Recycler is a pressurized system. Only trained operators should adjust, maintain and repair this equipment.
- Inbound pressure should never exceed 8.6bar (125psi).
- All pneumatic lines should be inspected for holes, wear and proper fit.
- Safety pins and restraints should be fitted at all Air Hose couplings to prevent accidental disconnection.
- Vibrating parts should **never** come in contact with static or stationary items.
- Verify the unit is stable, secure and on a flat surface.
- Do not operate without the safety skirt in place.
- Before all activities (other than normal operation), ensure the entire system is depressurized.

**IMPORTANT:** Under **NO** circumstances should any inspection, adjustment or lubrication be conducted while running or connected to an air supply.

# 3.0 Requirements

## 3.1 Air Supply/Compressor

Clean, dry compressed air must be supplied. This unit requires a minimum air supply of **2m<sup>3</sup>/min (70cfm) at 2.8bar (40psi)**.

## 3.2 Air Supply Connection

This unit has a 12.7mm (.5in) standard pipe typically fitted with a 12.7mm (.5in) universal 2 lug coupling. The air supply hose should be fitted with a mating connector or replace both connectors as desired.

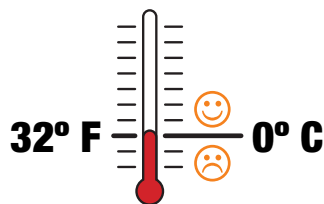


Connect a minimum 12.7mm (.5in) supply hose to **Supply Line Connection**.  
**Note:** High humidity environments require additional moisture separators.

## 3.3 Ambient Temperature

Ambient temperature should be above 0° Celsius (32° Fahrenheit). Otherwise:

- Use winter grade pneumatic tool oil in lubricator.
- Minimize moisture in supply air.
- Bearing grease will thicken in cold environments, requiring use of low temperature grease. Warming the unit prior to operation may be required.



## 3.4 Media Waste & Collection

Containers are necessary under each downspout for collection and transport Sponge Media™ and waste.



# 4.0 Operation

## Before Recycler Pressurization and Operation:

- Vibrating parts should **never** come in contact with static or stationary items.
- Verify the unit is stable, secure and on a flat surface.
- All pneumatic lines should be inspected for holes, wear and proper fit.
- Safety pins and restraints should be fitted at all Air Hose couplings to prevent accidental disconnection.
- Before all activities (other than normal operation), ensure the entire system is depressurized.

Make sure the unit is unrestricted.  
Rigid connections reduce efficiency  
and can lead to damage.



Check **Pan Clamps** for tightness. They should not exceed 14kg (30lbs.) each at the end of the lever handle. Adjust by turning **Pan Clamp Hook**.



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Connect air supply hose to **Supply Line Connection** and secure with safety pins and restraints. **Note:** Regulators are factory set between 2.5-2.8bar (35-40psi) and should not require adjustment.



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Confirm pneumatic tool oil is visible in **Lubricator** (see section 5.0).

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Place buckets/bags under each **Particle Downspout**.



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Turn on by opening **Air Inlet Valve**.



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Add blasted Sponge Media through **Hopper**.



Oversized particles are ejected from **Large Particle Downspout**.

**WASTE: Dispose of Properly** →



Recyclable Sponge Media is ejected from **Reusable Media Downspout**.

**RECYCLABLE MEDIA: To create working mix, add 5% to 10% new Sponge Media; this mixture is now ready to blast.** →



Smaller contaminants and spent Sponge Media are ejected from **Fine Particle Downspout**.

**WASTE: Dispose of Properly** →



**Important:** Determining acceptable dust levels is dependant upon the project environment. If lower dust levels are required, pass recycled Sponge Media through **Hopper** one or more additional cycles.



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# 5.0 Maintenance

**IMPORTANT:** Under **NO** circumstances should any inspection, adjustment or lubrication be conducted while running or connected to an air supply.

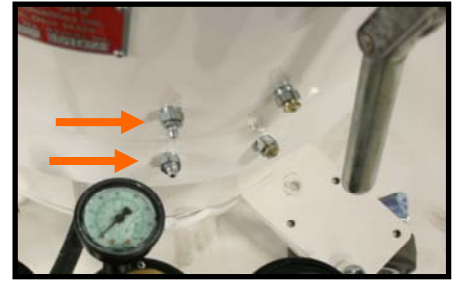
## 5.1 Bearing Grease

This unit was greased before shipment. If the unit has not been used for one year, add 1 to 2 pumps of grease. Use quality NLGI #2 grease such as:

- Citco AP, Citco oil
- Ore-Lube K2
- Mobilux, Mobil Oil Co.
- Socony, Mobil Oil Co.
- Val-Lith #IP, Valvoline Co.
- VS SGA, MM Industries, Inc.
- Multifak #2, Texaco Inc.
- Alvanie R#, Shell Oil Co.

## 5.2 Access to Grease Fittings

The two bearings should be greased by fittings on the side of the machine.



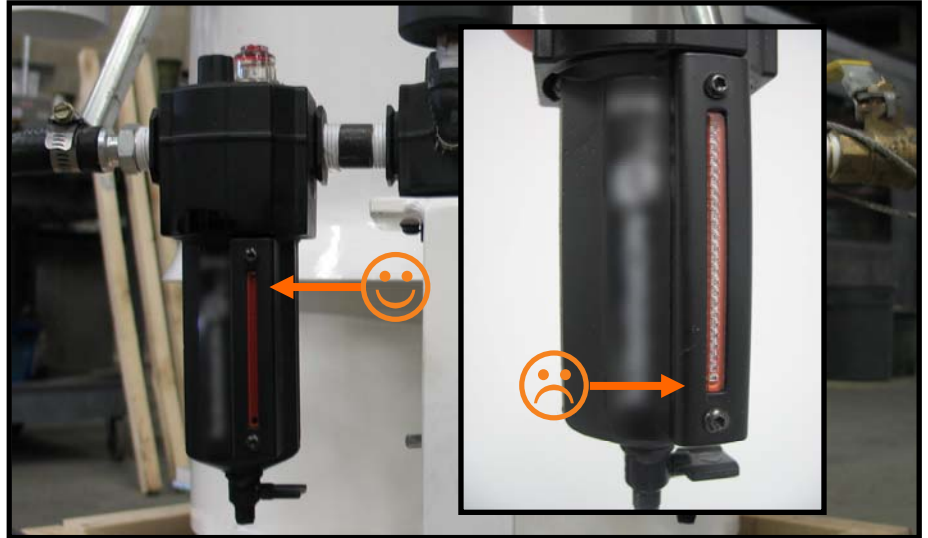
**DO NOT OVERGREASE.**

**IMPORTANT:** This unit was greased before shipment. Add grease using 1 to 2 pumps every 40 hours of operation. If the unit has not been used for one year, add 1 to 2 pumps of grease.

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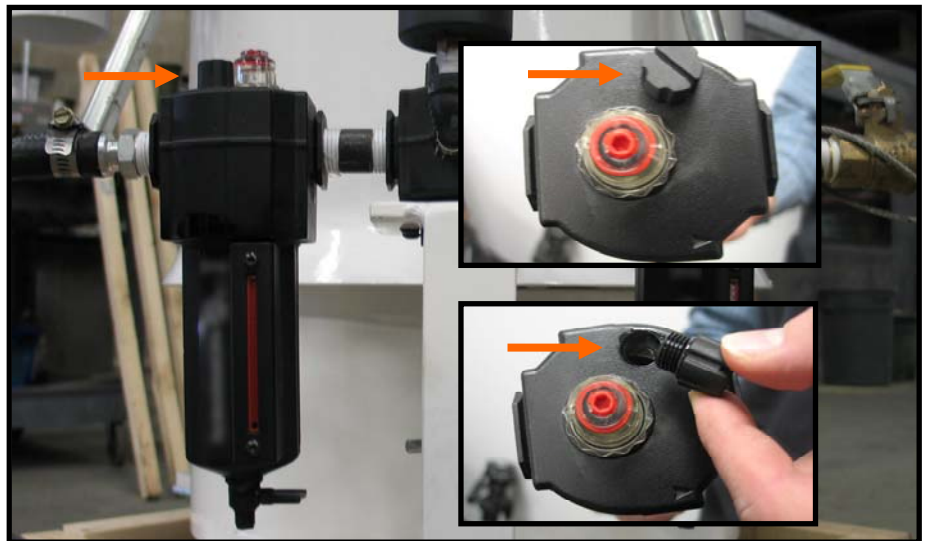
## 5.3 The Lubricator

Check the pneumatic oil level in **Lubricator**.



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Refill with pneumatic tool oil through the fill port on top as required. Use only **SAE 5W (ISO 32) NON-DETERGENT OIL**



## Sieve Assembly

**NOTE:** Failure to properly assemble and fasten **Sieve Assembly** will dramatically shorten its operating life.

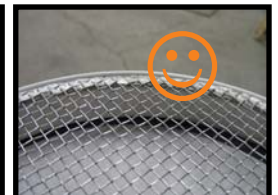
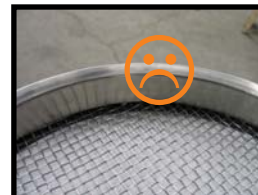
Assemble as follows:







1. Place **Fine Particle Downspout** through hole provided in **Vibratory Section**. **Note:** Be sure downspout is centered.
2. Place a **Flat Gasket** into **Shallow Funnel**.
3. Place the **Bottom Screen** (#16\* mesh) onto **Flat Gasket**. **IMPORTANT: Place mesh screen side up\*\***
4. Place a **Flat Gasket** onto the mesh of **Bottom Screen**.
5. Place **Main Rim** over **Flat Gasket**.
6. Place a **Flat Gasket** into top of **Main Rim**.
7. Place **Top Screen** (#3\* mesh) into **Main Rim** and on top of **Flat Gasket**. **IMPORTANT: Place mesh screen side up\*\***
8. Place a **Flat Gasket** onto the **Top Screen**, making sure to center the **Flat Gasket**.
9. Place **Hopper** over **Flat Gasket**.
10. Attach all **Pan Clamps**. These must be adjusted properly to secure **Sieve Assembly** (refer to 4.0 Operation).

\*Top Screen standard size is #3; Bottom Screen standard size is #16 unless other sizes are specified or provided.

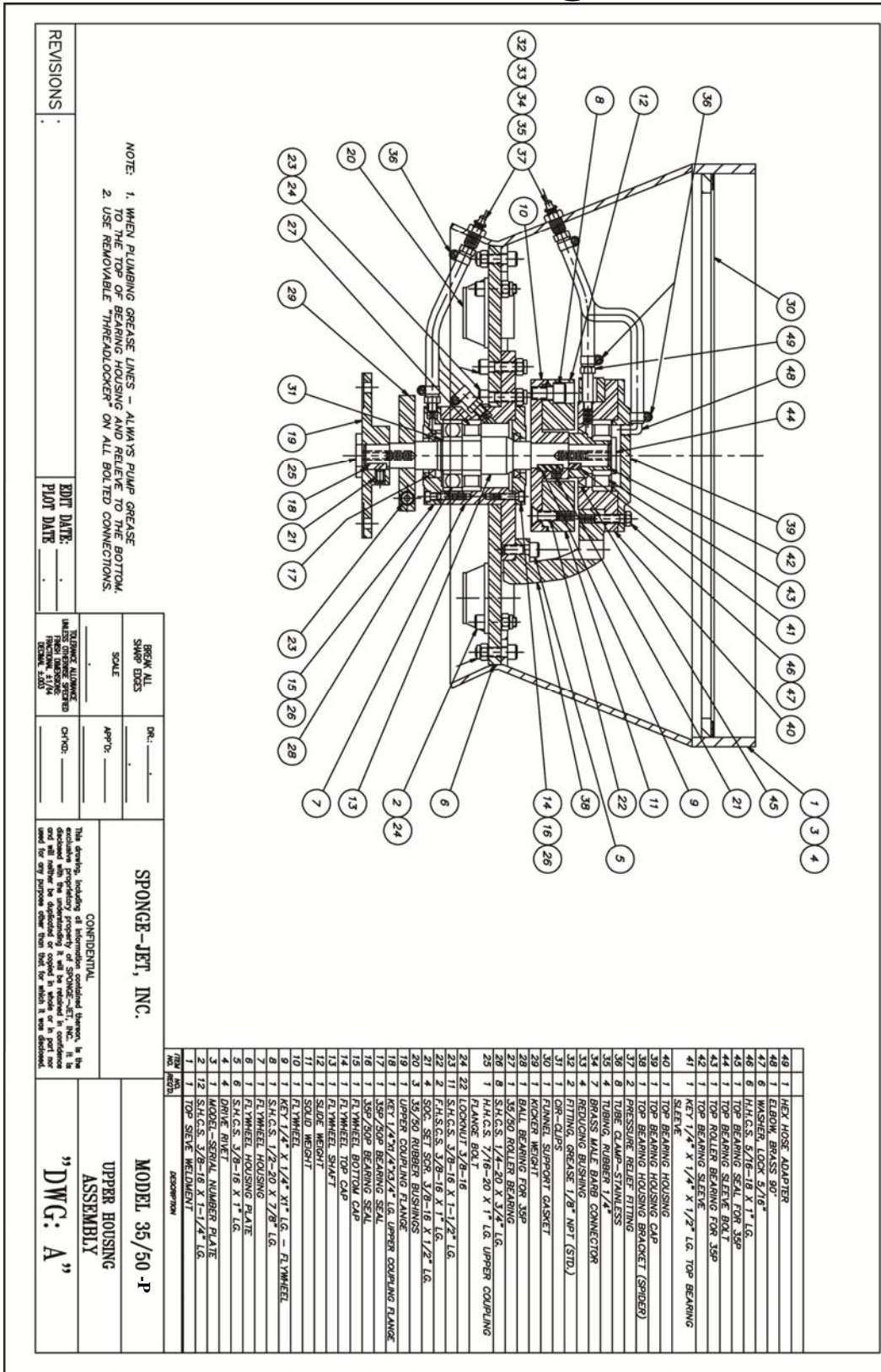
\*\*Screens must be assembled with mesh side up. Incorrect assembly will cause poor operation.



# 6.0 Troubleshooting

<p><b>Unit won't turn on or vibration is slow</b></p>	<p>Confirm <b>Pressure Gauge</b> reads between 2.5-2.8bar(35-40psi).</p> <p><b>If unit temperature is</b> near freezing or below,</p> <ul style="list-style-type: none"> <li>a) Warming the unit prior to operation may be required.</li> <li>b) Use winter grade pneumatic tool oil in lubricator.</li> <li>c) Minimize moisture in supply air.</li> </ul> <p><b>If vibration is slow but unit is operating,</b> run without Sponge Media until vibration normalizes.</p>
<p><b>Sponge Media is exiting Large Particle Downspout</b></p>	<p>Confirm <b>Top Screen</b> is properly installed and free of debris.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>
<p><b>When Blasting, excessive amounts of dust are observed</b></p>	<p>Confirm <b>Bottom Screen</b> is properly installed.</p> <p>Additional dust reduction can be achieved by:</p> <ul style="list-style-type: none"> <li>1. Passing Sponge Media through unit again.</li> <li>2. Using a smaller number <b>Bottom Screen</b> (with larger wire spacing).</li> </ul> <div style="text-align: right;">  </div>

# 7.0 Drawings



NOTE: 1. WASH PLUMBING GREASE LINES - ALWAYS PUMP GREASE TO THE TOP OF BEARING HOUSING AND RELIEVE TO THE BOTTOM.  
2. USE REMOVABLE "THREADDUCKER" ON ALL BOLTED CONNECTIONS.

REVISIONS:

EDIT DATE: \_\_\_\_\_  
PLOT DATE: \_\_\_\_\_

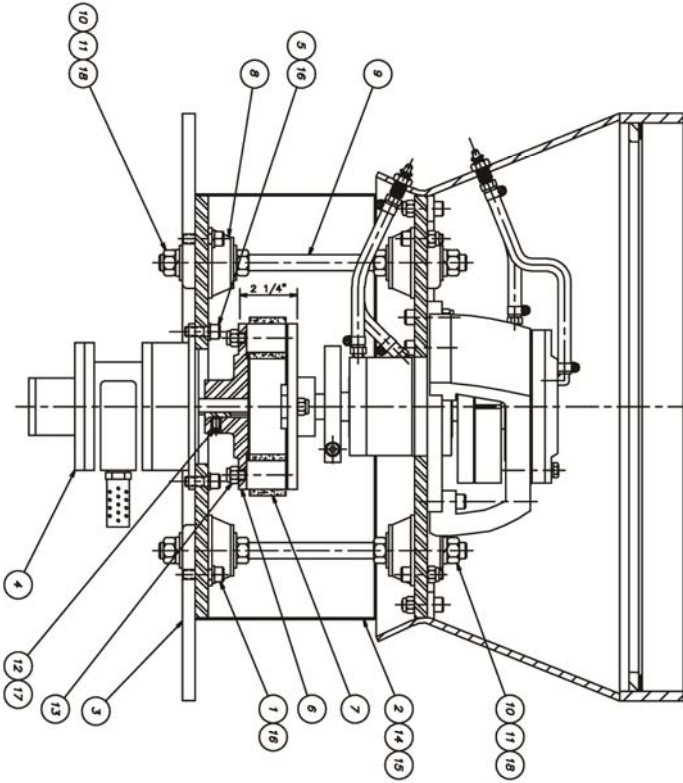
BREAK ALL SHARP EDGES  
SCALE: \_\_\_\_\_  
OR: \_\_\_\_\_  
APP'D: \_\_\_\_\_  
CHK'D: \_\_\_\_\_

THIS DRAWING IS UNLESS OTHERWISE SPECIFIED TO BE IN ACCORDANCE WITH THE STANDARD PRACTICES OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS.

CONFIDENTIAL

Sponge-Jet, Inc.

MODEL 35/50-P  
UPPER HOUSING  
ASSEMBLY  
"DWG: A"



NOTE: 1. THE FLEXIBLE COUPLING MUST BE ADJUSTED TO 2 1/4" FROM THE TOP OF THE UPPER FLANGE TO THE BOTTOM OF THE MOTOR FLANGE.  
 2. DO NOT ATTEMPT TO OPERATE THE MOTOR WITHOUT THE FLEXIBLE COUPLING BOLTED TO THE UPPER FLANGE AND MOTOR FLANGE.  
 3. USE REMOVABLE "THREADED LOCKER" ON ALL BOLTED CONNECTIONS.

ITEM NO.	DESCRIPTION
18	12 5/8" DIA FLAT WASHERS
17	1 KEY MOTOR SHAFT 3/16" SQ. X 1" LG.
16	10 WASHER SPLIT 3/8"
15	1 OVER CENTER LATCH STRAP
14	1 TRUNION NUT AND BOLT STRAP
13	4 LOCKWIT 3/8-16
12	2 SOG. SET SCR. 3/8-16 X 1/2" LG.
11	6 WASHER SPLIT 5/8"
10	12 NUT. HEX 5/8-11
9	3 35/50 RECICLER SUSPENSION RODS
8	3 BUSHING. RUBBER
7	1 35/50 RECICLER FLEXIBLE COUPLING
6	1 MOTOR FLANGE
5	4 S.H.C.S. 3/8-16 X 1" LG.
4	1 35/50 AIR MOTOR
3	1 MOTOR PLATE
2	2 35/50 SIDE COVERS
1	6 S.H.C.S. 3/8-16 X 1-1/4" LG.

REVISIONS: \_\_\_\_\_

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DR: \_\_\_\_\_

APPRO: \_\_\_\_\_

MODEL 35/50

MODEL RBR-15/22

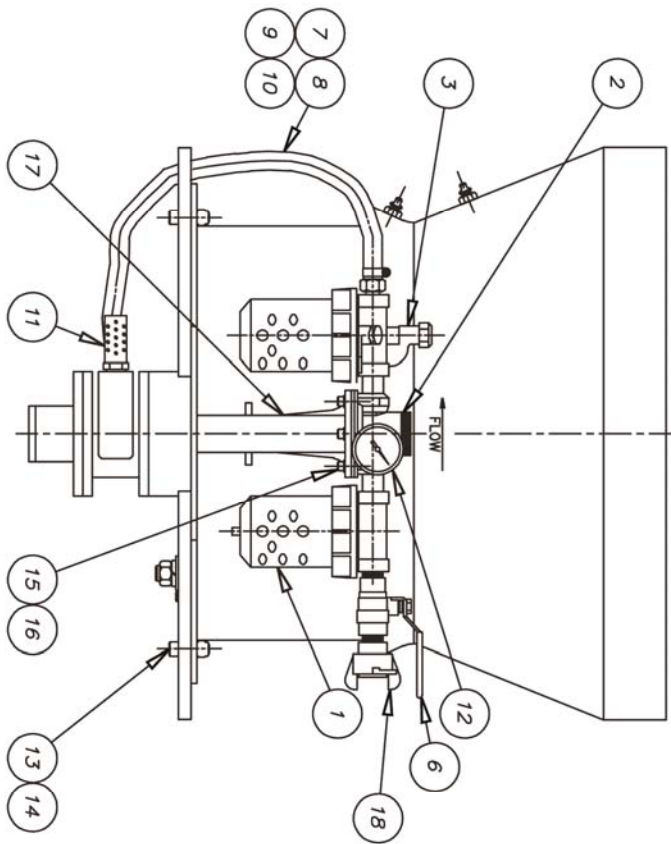
PNEUMATIC MOTOR DRIVE ASSEMBLY

"DWG: B"

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES (FRACTIONS) UNLESS OTHERWISE NOTED

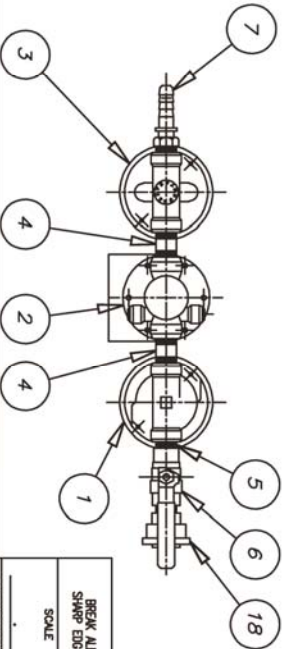
CONFIDENTIAL

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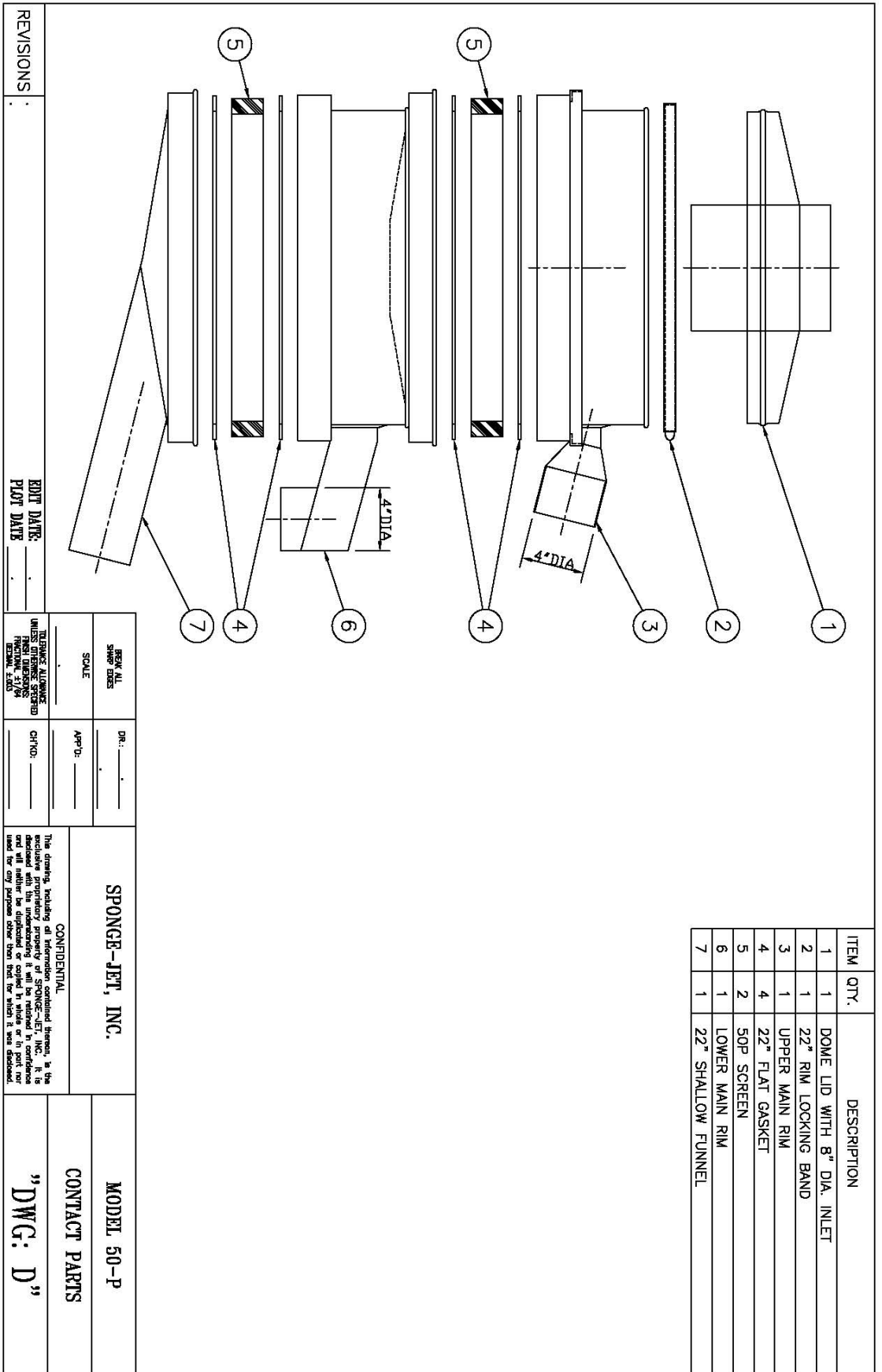


REV	NO.	DESCRIPTION
1	1	35-P MOISTURE SEPARATOR
2	1	35-P REGULATOR
3	1	35-P AUTOMATIC LUBRICATOR
4	1	1/2" NPT X 2' LG NIPPLES
5	2	1/2" NPT GLOBE NIPPLES
6	1	1/2" BALL VALVE
7	1	1/2" NPT HOSE BARB FITTING WITH ORIFICE
8	2	HOSE DAMPS
9	1	1/2" LG. AIR HOSE
10	1	FILTER
11	1	2" 1/2" GAGES, 0-160 PSI W/CUP
12	2	LOCKNUT 3/8-16 (SHIPPING ONLY)
13	2	S.H.C.S. 3/8-16 X 1-1/2" LG. (SHIPPING ONLY)
14	2	S.H.C.S. 3/8-16 X 1-1/2" LG. (SHIPPING ONLY)
15	3	1/4" - 20 UNC SHCS X 1" LG
16	3	1/4" LOCKWASHER
17	1	PRG. MOUNT
18	1	1/2" X 2 PRONG COUPLING

- NOTE:
1. ALL FITTINGS SEALED WITH TEFLON TAPE.
  2. AIR SYSTEM IS FACTORY SET TO RUN AT 3000 RPM MAXIMUM.
  3. FILTER, REGULATOR, AND LUBRICATOR ARE CURRENTLY SUPPLIED BY THE CUSTOMER FOR
  4. SAFETY TIE BARB FITTING WITH ORIFICE TO LUBRICATOR.



REVISONS	EDIT DATE:	DATE:	SCALE	DR:	APP'D:	CONFIDENTIAL	MODEL 35/50-P
	PLAT DATE		BREAK ALL SHARP EDGES			This drawing, including all information contained hereon, is the exclusive property of H&M INDUSTRIES, INC. It is to be used for the production of parts and is not to be used for any purpose other than that for which it was drawn.	PNEUMATIC SYSTEM ASSEMBLY
			TOLERANCE ALLOWANCE UNLESS OTHERWISE SPECIFIED FRACTIONS: 1/16" DECIMAL: .015" MIN. DIA.				"DWG: C"



ITEM	QTY.	DESCRIPTION
1	1	DOME LID WITH 8" DIA. INLET
2	1	22" RIM LOCKING BAND
3	1	UPPER MAIN RIM
4	4	22" FLAT GASKET
5	2	50P SCREEN
6	1	LOWER MAIN RIM
7	1	22" SHALLOW FUNNEL

REVISIONS : \_\_\_\_\_

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SCALE: \_\_\_\_\_

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APP'D: \_\_\_\_\_

CHK'D: \_\_\_\_\_

**SPONGE-JET, INC.**

**MODEL 50-P**

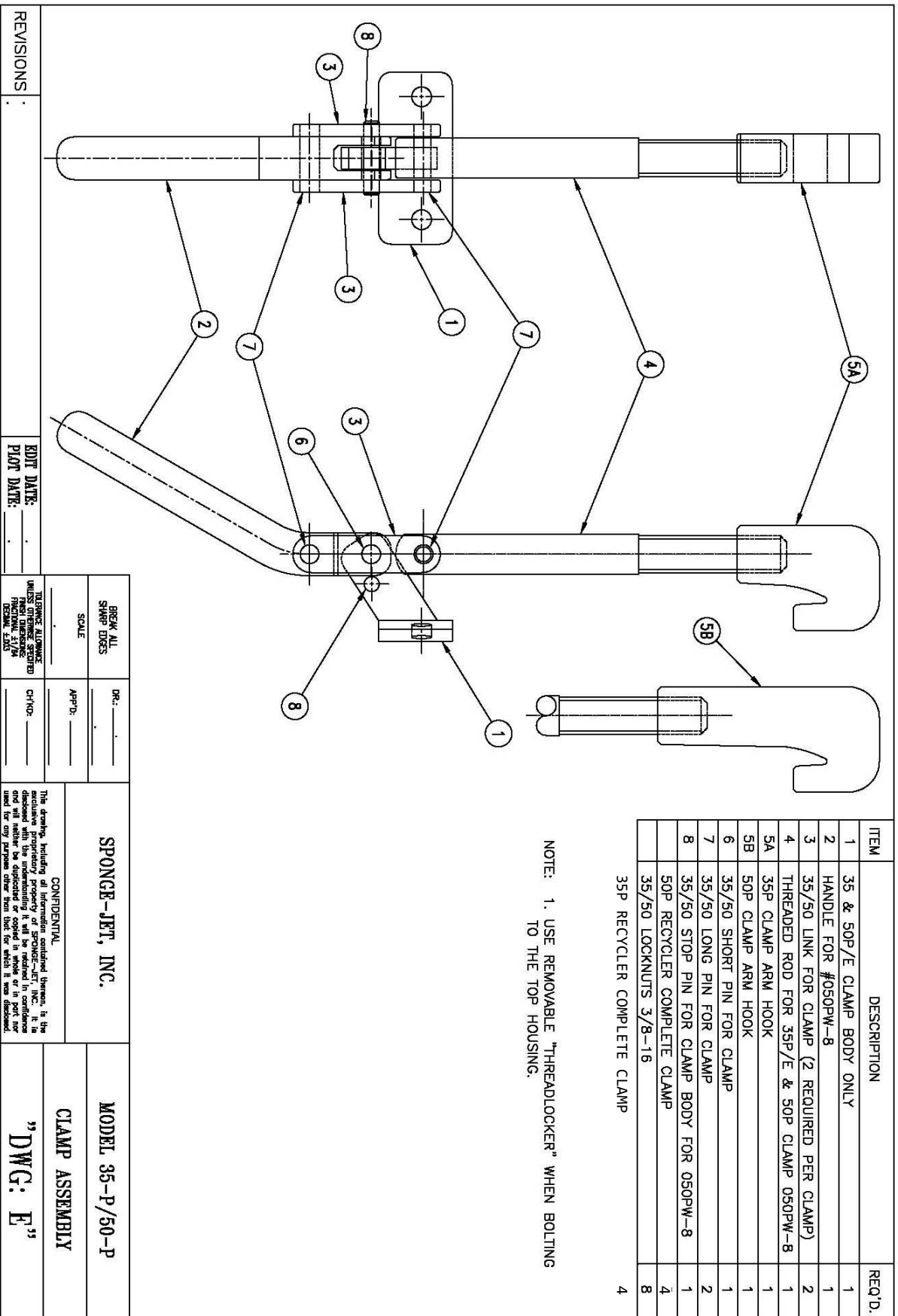
**CONTACT PARTS**

**"DWG: D"**

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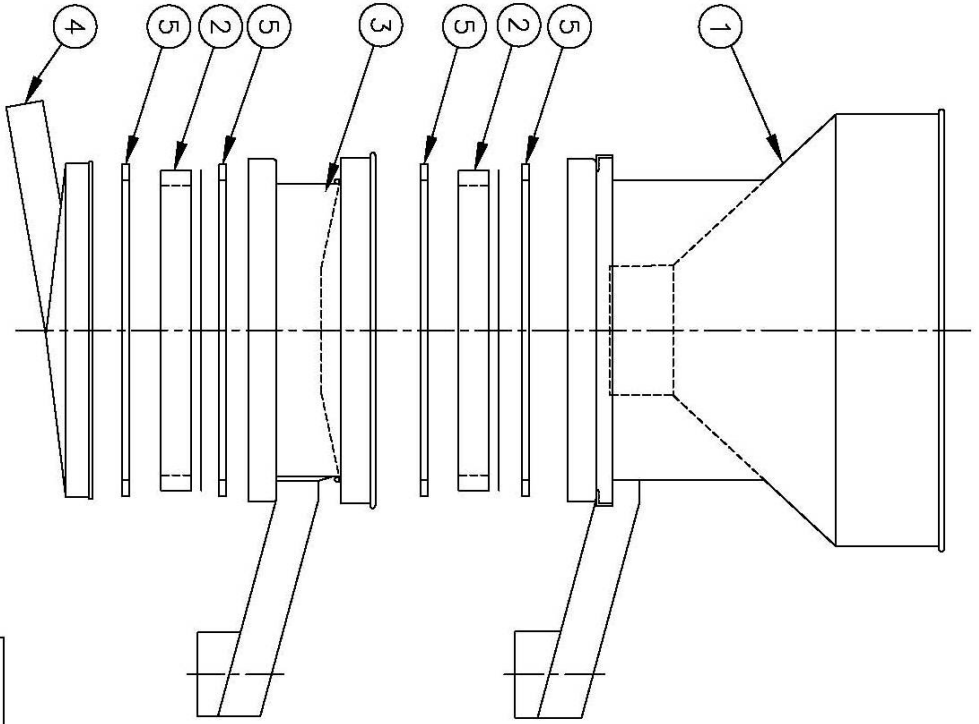


ITEM	DESCRIPTION	REQ'D.
1	35 & 50P/E CLAMP BODY ONLY	1
2	HANDLE FOR #050PW-8	1
3	35/50 LINK FOR CLAMP (2 REQUIRED PER CLAMP)	2
4	THREADED ROD FOR 35P/E & 50P CLAMP 050PW-8	1
5A	35P CLAMP ARM HOOK	1
5B	50P CLAMP ARM HOOK	1
6	35/50 SHORT PIN FOR CLAMP	1
7	35/50 LONG PIN FOR CLAMP	2
8	35/50 STOP PIN FOR CLAMP BODY FOR 050PW-8	1
	50P RECYCLER COMPLETE CLAMP	4
	35/50 LOCKNUTS 3/8-16	8
	35P RECYCLER COMPLETE CLAMP	4

NOTE: 1. USE REMOVABLE "THREADLOCKER" WHEN BOLTING TO THE TOP HOUSING.

REVISIONS	RDY DATE:	BREAK ALL SHARP EDGES	DR: _____	<b>SPONGE-JET, INC.</b> CONFIDENTIAL The drawing, including all information contained therein, is the exclusive proprietary property of SPONGE-JET, INC. It is to be used only for the purpose for which it was developed and is not to be used for any purpose other than that for which it was developed.	MODEL 35-P/50-P
	PLOT DATE:	SCALE	APP'D: _____		CLAMP ASSEMBLY
		UNLESS OTHERWISE SPECIFIED FINISH DIMENSIONS ARE IN INCHES (SEE DRAWING NOTES)	CH/CD: _____		"DWG: E"

ITEM	QTY.	DESCRIPTION
1	1	HOPPER
2	2	35-P SCREEN
3	1	MAIN RIM WITH 2" X 9" OVERSIZE CHUTE
4	1	SHALLOW FUNNEL
5	4	FLAT GASKETS



REVISIONS	EDIT DATE:	DR.:	<p align="center"><b>SPONGE-JET, INC.</b></p> <p align="center">CONFIDENTIAL</p> <p><small>This drawing, including all hereinafter contained therein, is the exclusive proprietary property of SPONGE-JET, INC. It is declared with the understanding it will be retained in confidence and will neither be duplicated or copied in whole or in part nor used for any purpose other than that for which it was designed.</small></p>	MODEL 35-P
	PLDT DATE:	APP'D:		CONTACT PARTS
				"DWG: F"

BREAK ALL SHARP EDGES	SCALE
TOLERANCE ALLOWANCE UNLESS OTHERWISE SPECIFIED DECIMAL INCHES	

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**NOTES:** \_\_\_\_\_

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**MODEL#:** \_\_\_\_\_

**SERIAL#:** \_\_\_\_\_

## EC Declaration of Conformity

**We Of:**

Sponge Jet Inc.  
14 Patterson Lane,  
Newington, N.H. 03801  
Telephone Inquiries to: 1-603-610-7950  
Email: sjadmin@spongejet.com



**Hereby declare that:**

Equipment: Sponge-Jet Recycler  
Model: 25P-CE or 35P-CE or 50P-CE  
Serial Number: XXXX  
Year of construction: XXXX

**Is in conformity with the applicable requirements of the following standard documents**

**The Directives covered by this Declaration:**

Machinery Directive: 2006/42/EC (Formerly 98/37/EC)

**The Machinery Directive 2006/42/EC Standards:**

EN ISO 14121-1-2007 - (Safety of Machinery—Risk Assessment)

I hereby declare that the equipment named above has been designed to comply  
With the relevant sections of the above referenced specifications. The unit complies  
With all applicable Essential Requirements of the Directives.

Signed: \_\_\_\_\_



Name: Michael T Merritt  
Position: President  
On This Date: XX/XX/XXXX

**Authorised Representative:**

Eurolink (Europe) limited  
Avalon House  
Marcham Road  
Abingdon OX14 1UD  
UK