

WARNING: Do Not Operate Before Reading Manual

T855/T855RS/T1055 OPERATOR'S MANUAL

Models

T855 T1055
T855RS



Disclaimer Statement:

All information, illustrations and specifications in this manual are based on the latest information available at the time of publishing. The illustrations used in this manual are intended as representative reference views only. Products are under a continuous improvement policy. Thus, information, illustrations and/or specifications to explain and or exemplify a product, service or maintenance improvement may be changed at any time without notice.

Rights Reserved Statement:

No part of this publication may be reproduced or used in any form by any means - graphic, electronic or mechanical, including photocopying, recording, taping or information storage and retrieval systems - without the written permission of M-D Pneumatics®.

Product information and specifications subject to change.

Table of Contents

Introduction	1
Safety	2
Graphic Conventions in this Manual	2
Safety Instructions.....	3
Safety Precautions	3
T855RS.....	4
RS Advanced Technology Features & Benefits.....	4
Mounting	4
Specifications.....	5
Installation	6
Safety Checklist	6
Specifications.....	7
Outline Drawings.....	8
T855 / T855RS / T1055 Vent Holes	9
PTO Selection for Transmission.....	10
Engine Speed	10
Pressure Relief Valve	10
Air Filter	10
Suction and Discharge Piping	10

Mounting Bracket.....	10
T855 & T855RS Optional Mounting Adaptor Plate.....	11
Mounting Adaptor Plate Kit: 61590	11
Torque Values.....	11
Check Valve	12
Mufflers and Discharge Filtration	12
Vacuum Valve.....	12
Performance Curves	14
Performance Curves (US)	14
Performance Curves (Metric).....	18
Lubrication	22
Filling Procedure	22
Operation	24
Maintenance	25
Regular Maintenance.....	25
Blower Service & Repair	25
Recommended Lubricants	26
Recommended Lubricants for Rotary Blowers and Vacuum Boosters.....	26
Assembly Drawing and Parts List	28
Assembly Drawing	28
Parts List	29
Warranty – Blower Products.....	30
Operating Data Form / Product Registration.....	31

CONGRATULATIONS on the purchase of a new **M-D Pneumatics® Transport Blower**. Please examine the blower for shipping damage, and if any damage is found, report it immediately to the carrier. If the blower is to be installed at a later date, make sure it is stored in a clean, dry location and rotated monthly. Make sure covers are kept on all openings. If the blower is stored outdoors, be sure to protect it from weather and corrosion.

M-D Pneumatics Transport Blowers are built to exacting standards and, if properly installed and maintained, will provide many years of reliable service. Read and follow every step of these instructions when installing and maintaining the blower.

NOTE: Record the blower model and serial numbers of the machine in the OPERATING DATA form on the inside back cover of this manual. Use this identification on any replacement part orders, or if service or application assistance is required.

02

SAFETY

GRAPHIC CONVENTIONS IN THIS MANUAL

The following hazard levels are referenced within this manual:



DANGER

Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



WARNING

Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



CAUTION

Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates a situation that can cause damage to equipment, personal property, and/or the environment or cause the equipment to operate improperly.

NOTE: Indicates a procedure, practice, or condition that should be followed in order for the equipment to function in the manner intended.



CAUTION



Read manual before operation or bodily harm may result. Attention should be given to the safety related sections of this manual.

SAFETY INSTRUCTIONS

1. Do not operate before reading the enclosed instruction manual.
2. Use adequate protection, warning and safety equipment necessary to protect against hazards involved in installation and operation of this equipment.



NOTICE

The above safety instruction tags were attached to your unit prior to shipment. Do not remove, paint over or obscure in any manner. Failure to heed these warnings could result in serious bodily injury to the personnel operating and maintaining this equipment.

- WARNING**
- Keep hands and clothing away from rotating machinery, inlet and discharge openings.
 - Blower and drive mounting bolts must be secured.
 - Drive belts and coupling guards must be in place.
 - Noise level may require ear protection.
 - Blower heat can cause burns if touched.

- Do not work under the vehicle while the engine is running.
- Do not work on a shaft (with or without a guard) while the engine is running.
- Do not engage or disengage driven equipment by hand from under the vehicle while the engine is running.
- In order to avoid becoming entangled, install the power take off and/or shaft behind the frame rail, tanks, battery box, etc.
- If power take off and/or shaft are still exposed after installation, install a guard.
- Install a support strap when servicing a drive shaft to prevent personal injury.

A SERIOUS OR FATAL INJURY CAN OCCUR:

- If you lack proper training
- If you fail to follow proper procedures
- If you do not use proper tools and safety equipment
- If you assemble drive line components improperly
- If you use incompatible drive line components
- If you use worn out or damaged drive line components
- If you use drive line components in a non-approved application

Safety Precautions

For equipment covered specifically or indirectly in this operator’s manual, it is important that all personnel observe safety precautions to minimize the chances of injury. Among many considerations, the following should particularly be noted:

- Rotating shafts can be dangerous. You can snag clothes, skin, hair, hands, etc. This can cause serious injury or death.

This manual contains safety instructions. Read, understand and follow this manual.

- Get proper training
- Learn and follow safe operating procedures
- Use proper tools and safety equipment
- Use proper components in good condition

03

T855RS

RS ADVANCED TECHNOLOGY FEATURES & BENEFITS

This section is for items specific to blowers enhanced with M-D Pneumatics RS Advanced Technology. **Please see remainder of this manual for all other blower specifications as well as safety warnings and precautions.**

T855RS Advanced Technology transport blowers are designed for the loading and unloading of cement, fly ash, powders, crushed limestone, sand, and granular materials. They offer customers:

- Widest range of flow of any blower on the transport market
- Reduces offload times by as much as 25%
- Can run quieter than many other blowers thanks to lower operating speeds
- Less net fuel consumption
- Vacuum performance to 18" Hg
- Operates slower yet moves more product
- Operates cooler, less oil changes when M-D Pneumatics premium lubricants are used
- Overall longer life
- Abradable / formable coating on rotor lobes reduces and tightens clearances; reduces slip
See Figure 3-1

OIL CAPACITIES (SAME AS T855)

	Horizontal Air Flow (Standard)	Vertical Air Flow (Standard)
Drive End	1.06 quarts	1.68 quarts
	34 oz.	54 oz.
	1005.5 mL	1597 mL
Non-Drive (Gear) End	1 quart	1.75 quarts
	32 oz.	56 oz.
	946.3 mL	1656 mL

Every Transport Blower is shipped with 1 gallon of M-D Pneumatics MD full synthetic oil to ensure the very best lubrication of bearings, gears, and seals.

MOUNTING

The T855RS can be mounted in vertical or horizontal flow configuration. M-D Pneumatics now offers an optional mounting plate adaptor that can be used to mount the T855RS on many L-Style vertical flow brackets. **See T855 & T855RS Optional Mounting Adaptor Plate on page 11.**

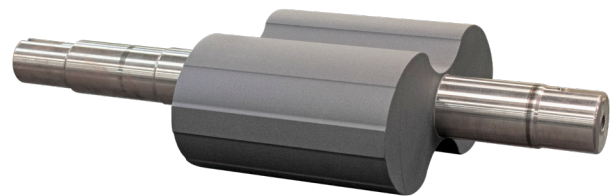


Figure 3-1 – T855RS Rotor with RS Advanced Technology Coating

SPECIFICATIONS

T855 with RS Advanced Technology™ Pressure Operating Parameters										
RPM	7 PSIG		12 PSIG		16 PSIG		18 PSIG		20 PSIG	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
600	127	6.5								
750	194	5.8	147	13.7						
1000	281	7.8	236	18.3	212	24.4	201	27.4		
1250	333	8.9	323	22.9	301	30.5	289	34.2	278	38.0
1500	384	10.1	410	27.5	388	36.5	377	41.1	367	45.6
1750	488	12.4	497	32.1	475	42.6	465	47.9	454	53.2
2000	627	15.5	584	36.6	562	48.7	552	54.8	542	60.8
2500	800	19.4	757	45.8	736	60.9	726	68.4	716	76.0
3000	973	23.3	930	55.0	909	73.1	899	82.1	889	91.2

Table 3-1 – T855RS Pressure Operating Parameters

T855 with RS Advanced Technology™ Vacuum Operating Parameters										
RPM	2" Hg		10" Hg		12" Hg		17" Hg		18" Hg	
	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
600	179	1.0	132.4	4.6	121	5.5				
750	231	1.3	184.3	5.7	173	6.8	138	9.6		
1000	318	1.7	270.8	7.6	259	9.1	224	12.8		
1250	404	2.1	357.3	9.5	346	11.4	311	16.0		
1500	491	2.5	443.8	11.4	432	13.6	397	19.2	389	20.3
1750	577	2.9	530.3	13.3	519	15.9	484	22.4	475	23.7
2000	664	3.4	616.8	15.2	605	18.2	570	25.6	562	27.1
2500	837	4.2	789.8	19.0	778	22.7	743	32.0	735	33.9
3000	1010	5.1	962.8	22.8	951	27.3	916	38.4	908	40.6

Table 3-2 – T855RS Vacuum Operating Parameters

Blue cell coloring indicates new T855RS performance capability parameters vs T855 standard.

NOTICE

Use caution when working around rotors as damage to the coating could result in loss of performance. Ensure inlet only receives filtered clean air.

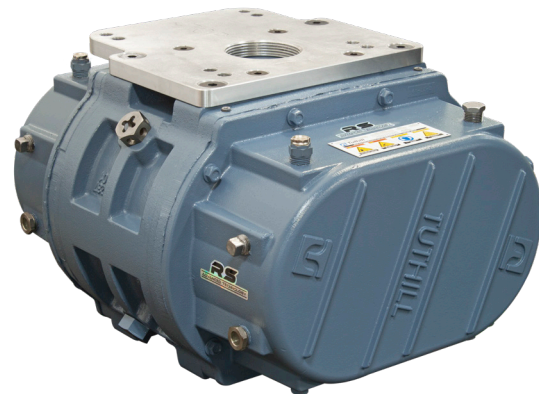


Figure 3-2 – T855RS with Optional Mounting Plate Adaptor

04

INSTALLATION

SAFETY CHECKLIST

Complete this checklist before operating the blower.

TRUCK NUMBER _____

GEARBOX NUMBER _____

P.T.O. NUMBER _____

P.T.O. RATIO _____

BLOWER MODEL NUMBER _____

BLOWER SERIAL NUMBER _____

DATE INSTALLED _____

INSPECTED BY _____

- Is ratio and horsepower correct for PTO?
- Mount PTO as per manufacturer’s recommendations and refill transmission.
- Ensure oil levels are at the center of the sight glass when blower is not running.
- Without drive line connected, can the blower be rotated by hand?
- Is the drive line installed at the correct angle and phase with all fasteners secured?
- Ensure PTO rotates blower in the correct direction indicated by arrow.
- Ensure air inlet filter is connected and located away from truck exhaust.
- Remove Camlock dust cap, and discharge piping open to atmosphere.
- With tractor engine at idle, slowly engage PTO. Check for correct rotation.
- Slowly bring blower up to operating speed.
- Check for vibration, mechanical noise, oil leaks and mounting integrity.
- Stop blower, connect blower discharge hose to trailer, and run blower at operating pressure of trailer for 15 minutes at normal speed.
- Does relief valve allow 15 psig (1 bar g) pressure for safety of trailer?
- Does engine maintain correct RPM throughout test?
- Shut down machine. Check Shur-Melt® plugs, relief valve, filter, piping, and oil sumps for integrity.
- Is correct engine speed label visible in cab?

 WARNING	
	<i>The blower and accessories will become hot enough to cause serious skin burns on contact.</i>
	<i>Rotating machinery is dangerous.</i>
	<i>Always wear ear protection when near an operating blower.</i>

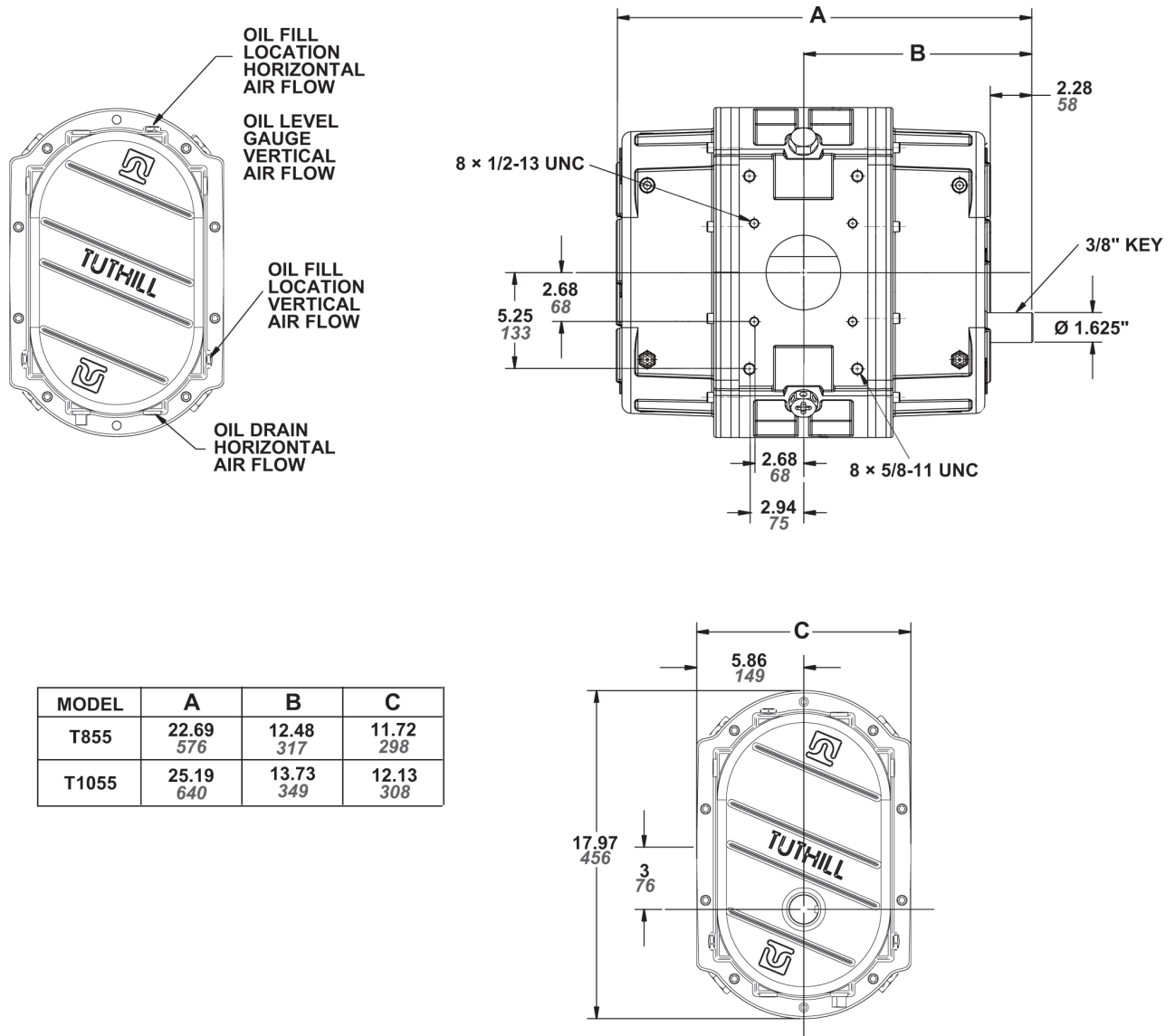
SPECIFICATIONS

MODEL	AIR FLOW RANGE	MAXIMUM PRESSURE	MAXIMUM VACUUM	RPM RANGE
T855	250 – 1,000 CFM (424 – 1,699 m³/h)	20 psig (1.37 bar g)	17 inch-Hg (575 Mbar)	1,000 – 3,000 (Pressure)
				750 – 3,000 (Vacuum)
T1055	450 – 1,300 CFM (765 – 2,209 m³/h)	18 psig (1.24 bar g)	17 inch-Hg (575 Mbar)	1,200 – 3,000 (Pressure & Vacuum)
T855RS	121– 1,010 CFM (206 – 1,716 m³/h)	20 psig (1.37 bar g)	18 inch-Hg (609 Mbar)	600 – 3,000 (Pressure & Vacuum)
<p>NOTE: Reduce the maximum operating pressure by 1 psi (0.068 bar) for each 2,000 feet (610 m) of elevation above sea level. Example: At an elevation of 4,000 feet (1,219 m), the maximum working pressure of the blower will decrease by 2 psi (0.137 bar).</p>				

Table 4-1 – Specifications

OUTLINE DRAWINGS

Dimensions shown are not on a controlled document and as such are subject to change. Certified drawings are available through your local M-D Pneumatics Transport Blower Channel Partner. Dimensions are shown in inches and millimeters.



MODEL	A	B	C
T855	22.69 576	12.48 317	11.72 298
T1055	25.19 640	13.73 349	12.13 308

Figure 4-1 – Outline Drawings

NOTE: T855RS dimension specification match_model T855.

T855 / T855RS / T1055 VENT HOLES

Each transport blower is supplied with 4 vent plugs that should be installed in the top four vent holes once the final mounting orientation of the blower is determined.

Another option (not included), depending on mounting bracket space, is to use 90° elbows with or without flexible tubing. If you choose to use vent plugs, then follow the subsequent instructions. The exact plug location will vary based on the mounting position.

The image below shows one option for the vent hole locations on a horizontal airflow mount.

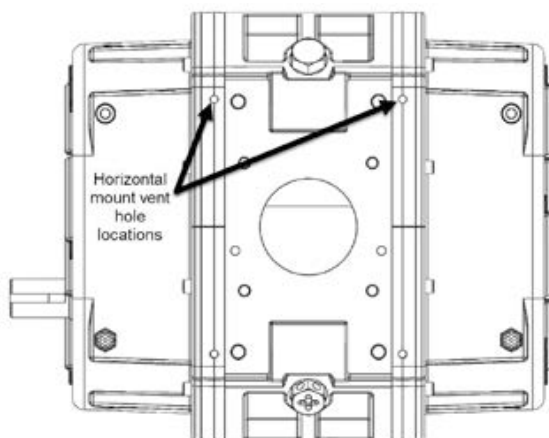


Figure 4-2 – Mounting Configuration

In this mounting configuration (**See Figure 4-2**) the four holes (two are shown and two are on the opposite side top) could have plugs added to them. This would leave the four holes on the bottom of the unit open or 90° 1/8" NPT elbows that face down.

Four vent holes should always be open to air. You can plug all the holes on the bracket side, then use four 90° elbows on the non-bracket side (horizontal mount). Or you can plug two on each end plate at the top side and leave two on each end plate at the bottom open.

⚠ CAUTION

Never plug all the vent holes or serious damage to seals and bearings will result. Four vent holes (two per side or all four on one side) must always be open.



Figure 4-3 – Alternate plug configuration: Horizontal mount with holes plugged on the bracket side



Figure 4-4 – Alternate plug configuration: Horizontal mount with street elbows

PTO SELECTION FOR TRANSMISSION

Blower speed and pressure require adequate horsepower and torque. **See Performance Curves on page 14.**

Engine speed and blower speed require the adequate ratio PTO be installed for proper blower operation.

ENGINE SPEED

Keep engine speed constant when the blower is in the operating cycle. Install a constant-speed governor or throttle control system to ensure proper blower operation.

PRESSURE RELIEF VALVE

Size the pressure relief valve for the correct air flow and pressure rating. Install the valve as close to the blower as possible and before the check valve.

Ensure that pipe compound is used on the threads of the male end of the relief valve to seal against air leakage.

NOTICE

An undersized or improperly set relief valve will cause the blower to operate at higher temperatures. This can cause the blower to overheat, causing irreparable damage.

AIR FILTER

Select a filter suitable for the air flow requirement of the application. Use air filters on food and plastic products to prevent contamination.

NOTICE

An undersized air filter will cause the blower to operate at higher temperatures. This can cause blower to overheat, causing irreparable damage.

SUCTION AND DISCHARGE PIPING

All piping should be free and clear of any welding slag or foreign material.

The suction piping requirement is a minimum of 5 in. (127 mm) diameter for proper flow to the blower.

Discharge piping is a minimum of 4 in. (102 mm) diameter.

NOTICE

Do not use a rubber elbow in the suction line during vacuum operation. The elbow will fail causing the blower to overheat. This will cause damage to the blower.

MOUNTING BRACKET

To reduce stress on the blower housing, be sure to properly mount the blower with the correct bracket.

T855 & T855RS OPTIONAL MOUNTING ADAPTOR PLATE

The Adaptor Plate allows easy conversion from other manufacturer's blowers that utilize L-style brackets and 3" NPT plumbing.

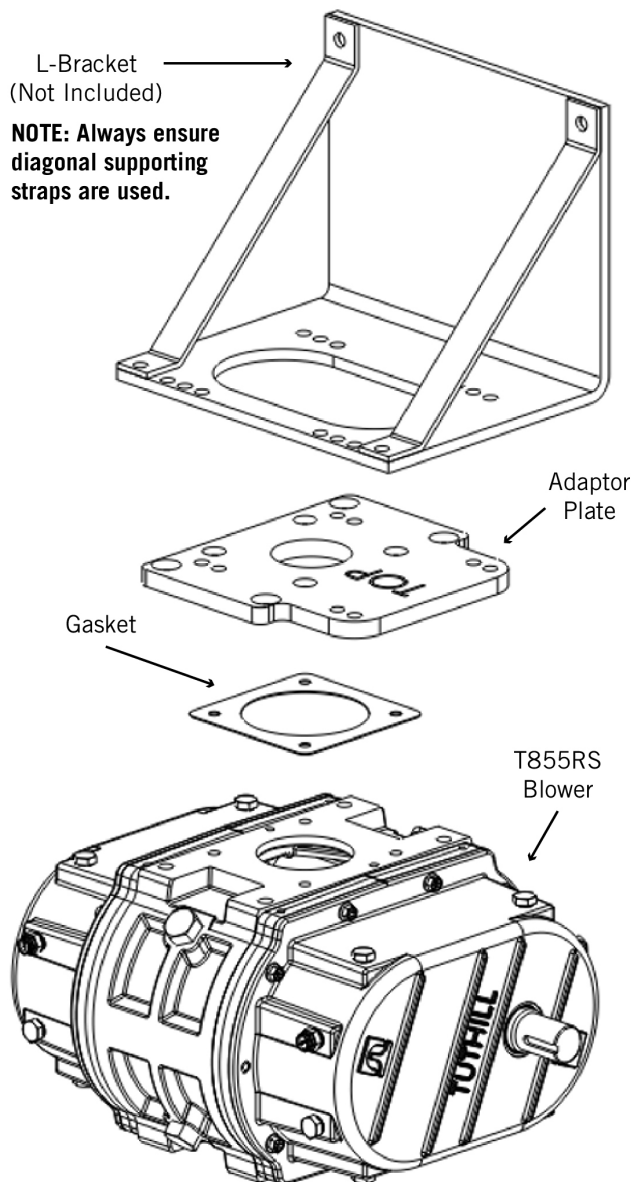


Figure 4-5 – Optional Mounting Adaptor Plate Kit Exploded Part Diagram with T855RS

Mounting Adaptor Plate Kit: 61590

Steps for installation:

1. Place the gasket over the 4 aligning bolt holes at the discharge (top) port.
2. Attach Adaptor Plate to the T855RS blower by placing it on top of the blower and gasket.
3. Secure the Adaptor Plate to the blower using the four 5/8"-11 x 1-1/4" Flat Socket Head Cap Screws and four 1/2" -13 x 1-1/4" Flat Socket Head Cap Screws.
4. Attach the blower / adaptor assembly to the L-Bracket using four 5/8"-18 x 1-1/4" Hex Head Screws with the Split Lock Washer between the screw head and top of the L-Bracket.

NOTICE

Use removable threadlocker during installation of the 5/8"-18 bolt in combination with the split lock washer.

NOTE: Includes plate, mounting bolts, and gasket.

Contact M-D Pneumatics or your authorized M-D Pneumatics distributor for more details or inquiries.

Torque Values

Bolt Size	Torque (in.-lbs.)
1/2"-13	80
5/8"-11	150
5/8"-18	170

NOTICE

Always ensure the diagonal straps are used on the L-bracket (not provided by M-D Pneumatics).

Do not overtighten the discharge fitting into the plate. Overtightening can damage the plate and the blower.

Use only bolts / hardware included with the adaptor plate. Using old bolts may damage plate due to differences in thread.

CHECK VALVE

Minimum restriction for application. Mount downstream of the relief valve. Size the valve for maximum air flow (CFM or m³/hr).

MUFFLERS AND DISCHARGE FILTRATION

Minimum restriction for application. Mount downstream of the relief valve.

VACUUM VALVE

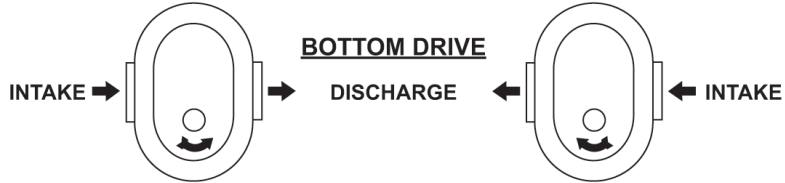
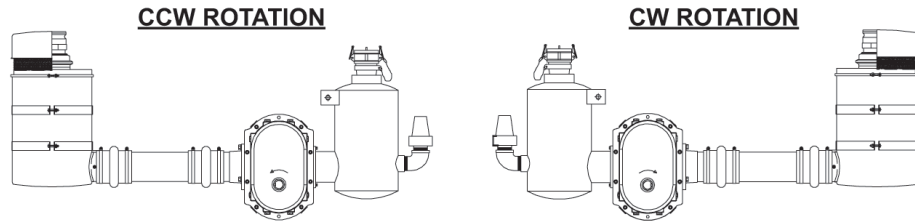
Size for proper air flow and vacuum rating.

This valve should be located before the blower inlet filter. This valve is normally mounted on the trailer.

NOTICE

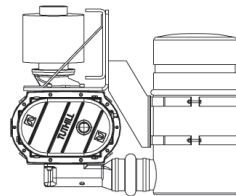
To properly protect the blower from overheating when vacuum loading, install a vacuum valve.

HORIZONTAL FLOW



VERTICAL FLOW

RIGHT DRIVE CCW ROTATION



LEFT DRIVE CW ROTATION

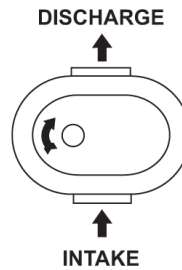


Figure 4-15 – Flow Direction and Rotation

PERFORMANCE CURVES

PERFORMANCE CURVES (US)

T850 / T855 PRESSURE CURVE

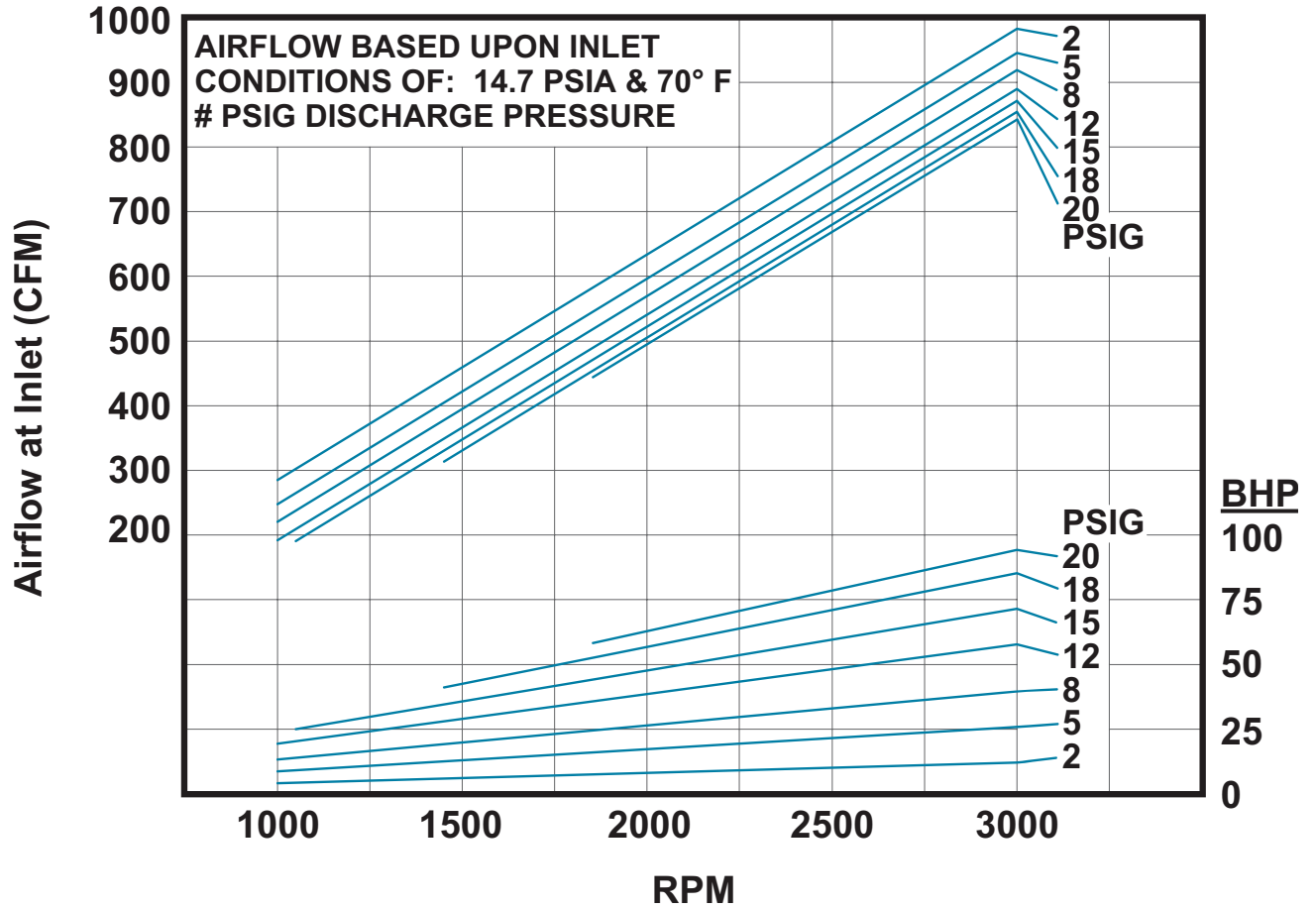


Figure 4-6 – T850 / T855 Pressure Curve (US)

T850 / T855 VACUUM CURVE

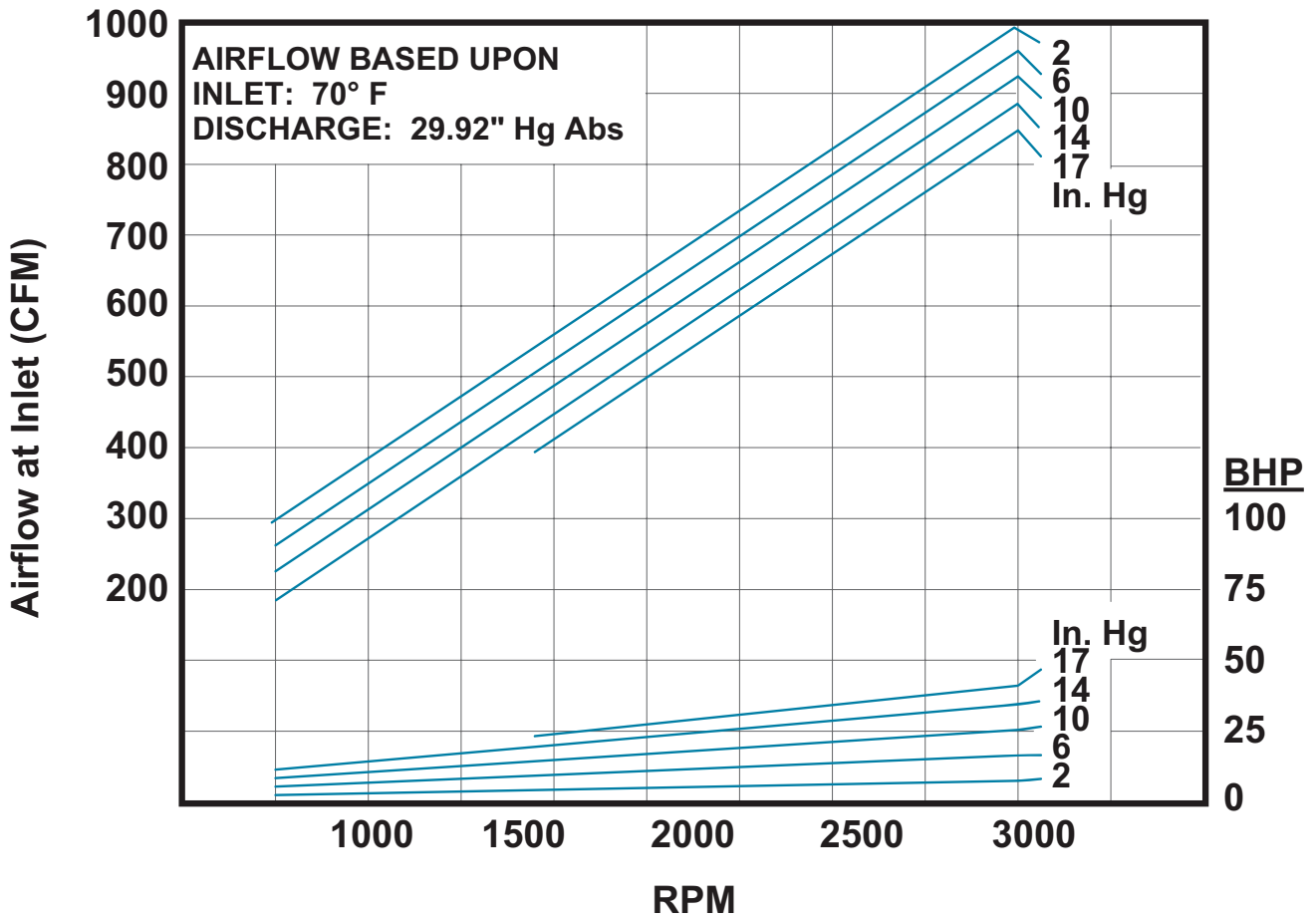


Figure 4-7 – T850 / T855 Vacuum Curve (US)

T1050 / T1055 PRESSURE CURVE

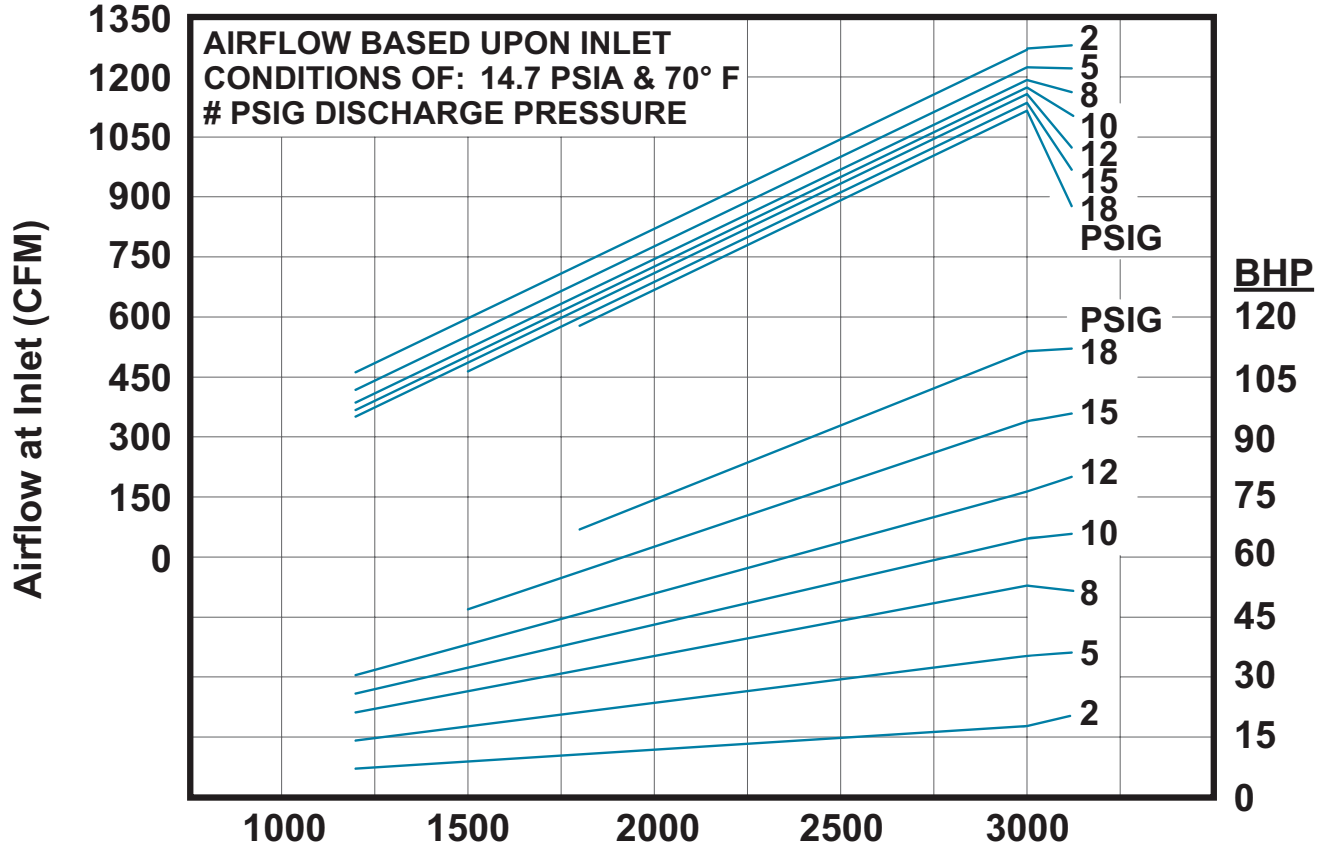


Figure 4-8 – T1050 / T1055 Pressure Curve (US)

T1050 / T1055 VACUUM CURVE

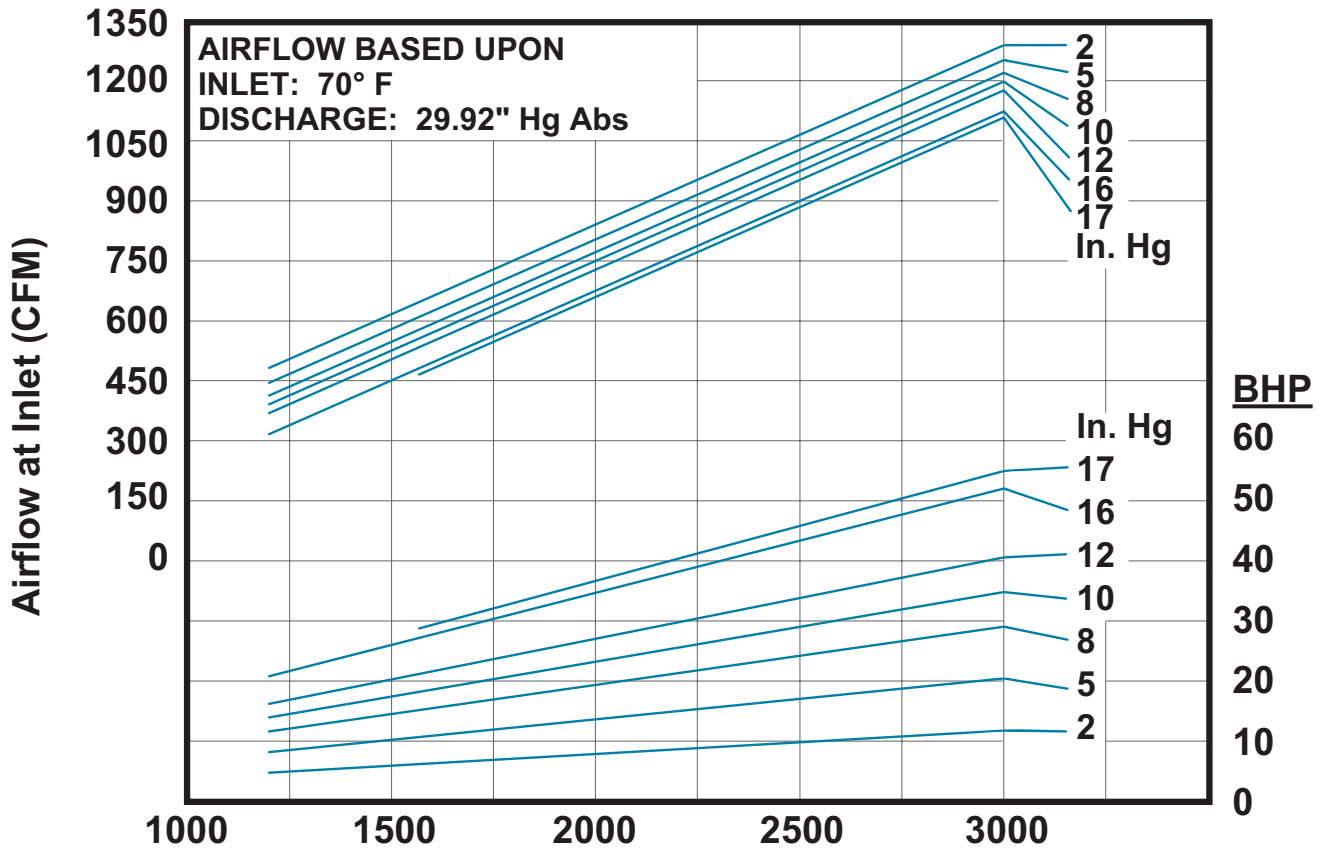


Figure 4-9 – T1050 / T1055 Vacuum Curve (US)

PERFORMANCE CURVES (METRIC)

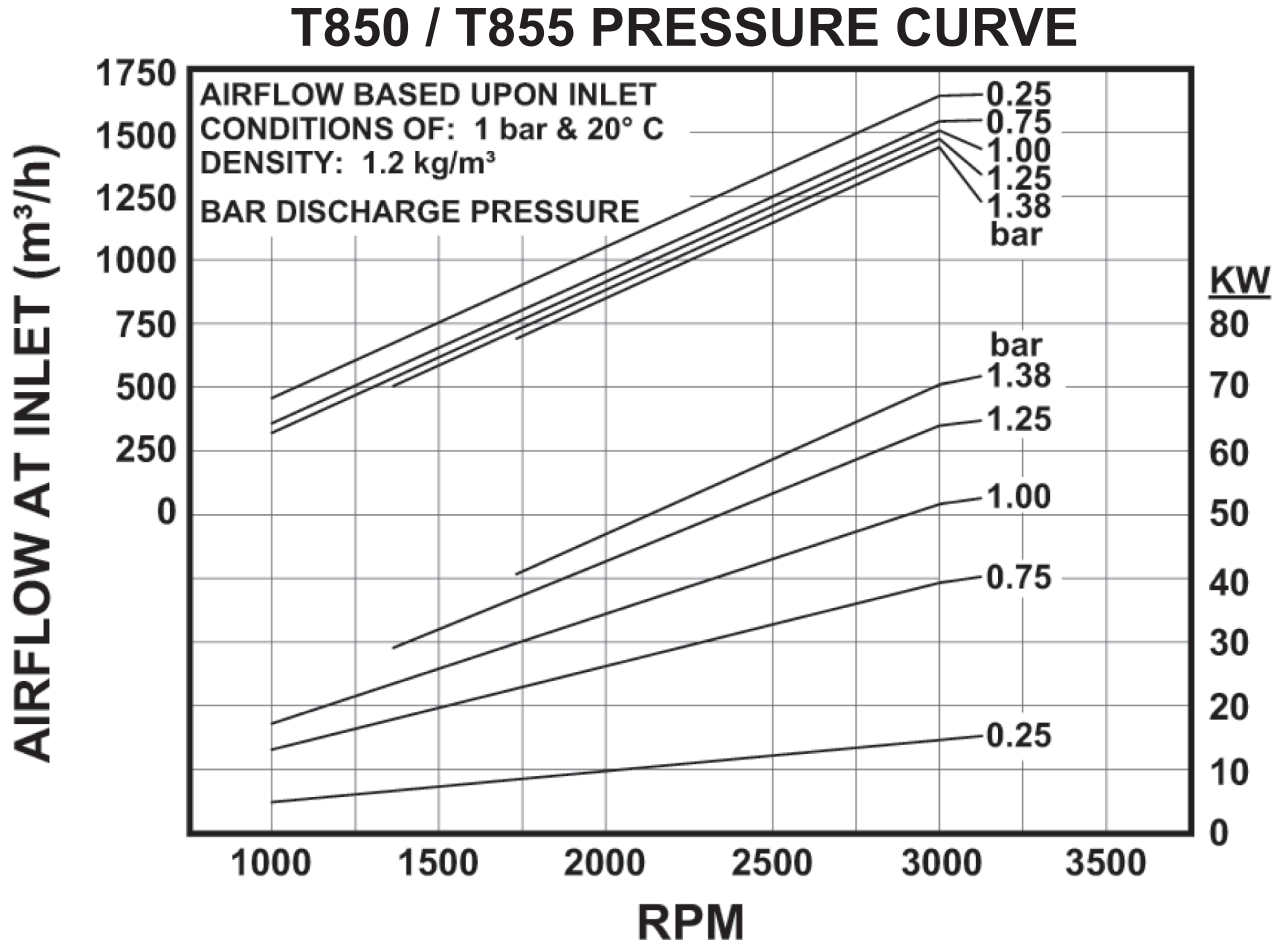


Figure 4-10 – T850 / T855 Pressure Curve (Metric)

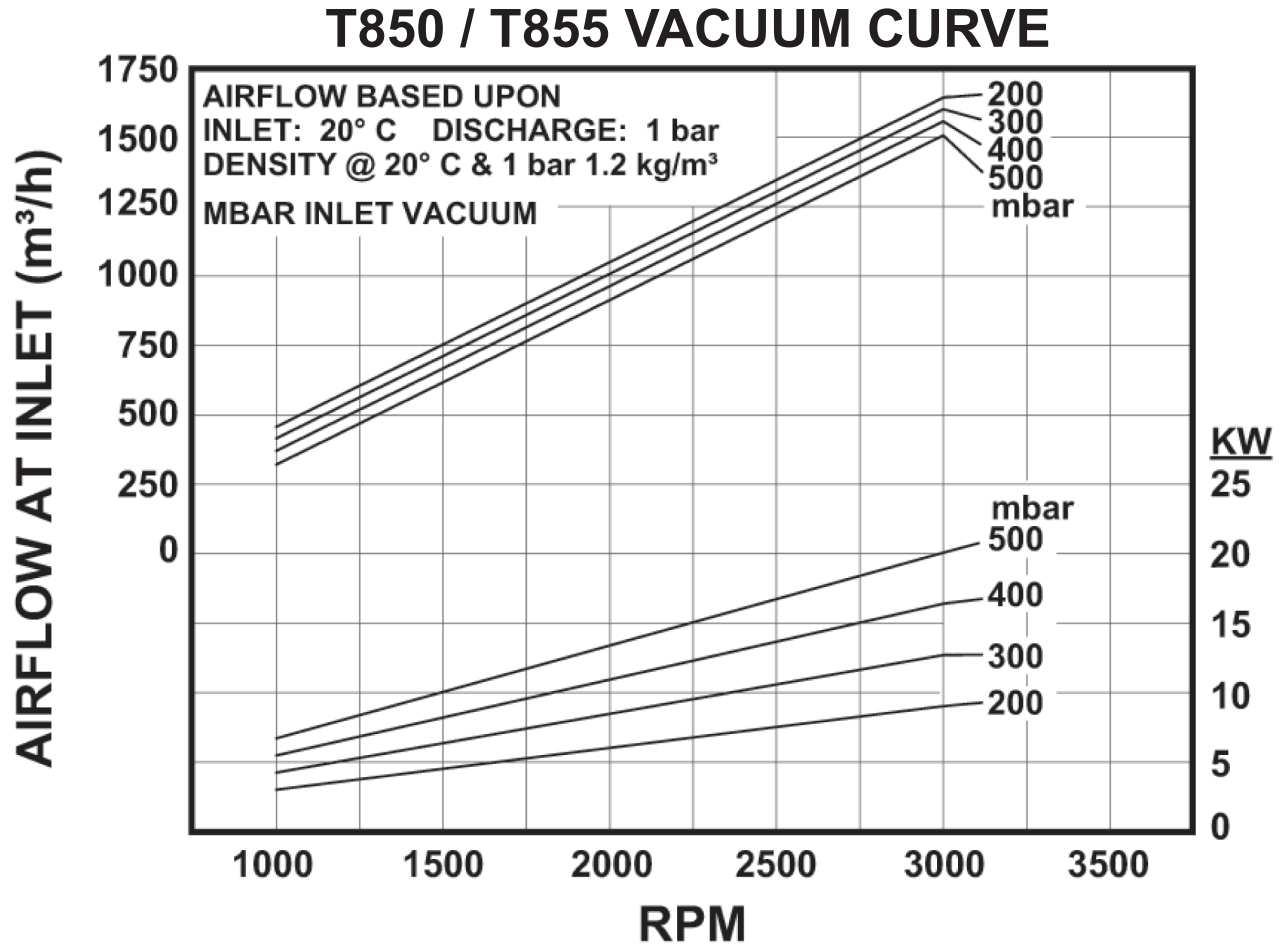


Figure 4-11 – T850 / T855 Vacuum Curve (Metric)

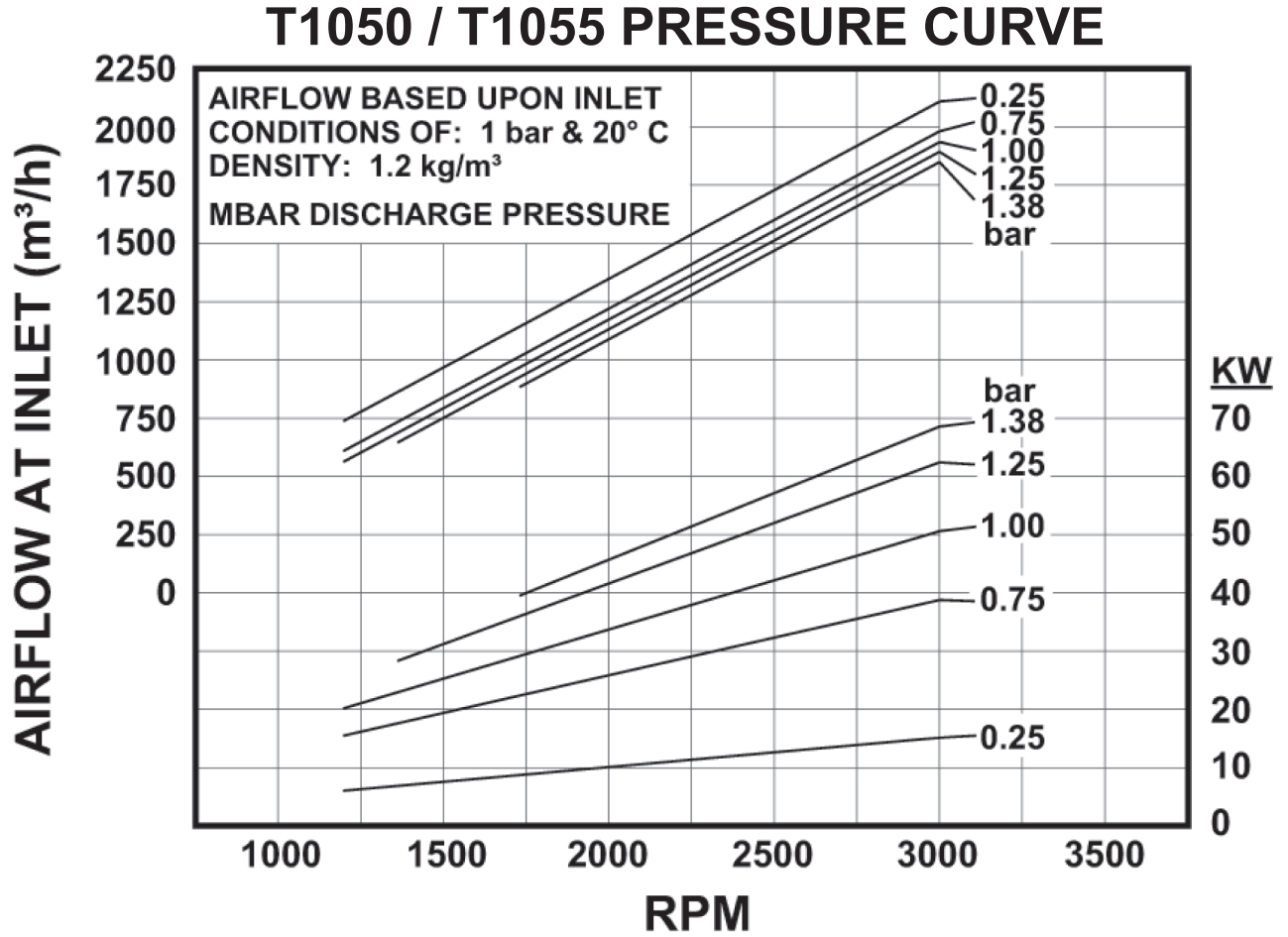


Figure 4-12 – T1050 / T1055 Pressure Curve (Metric)

T1050 / T1055 VACUUM CURVE

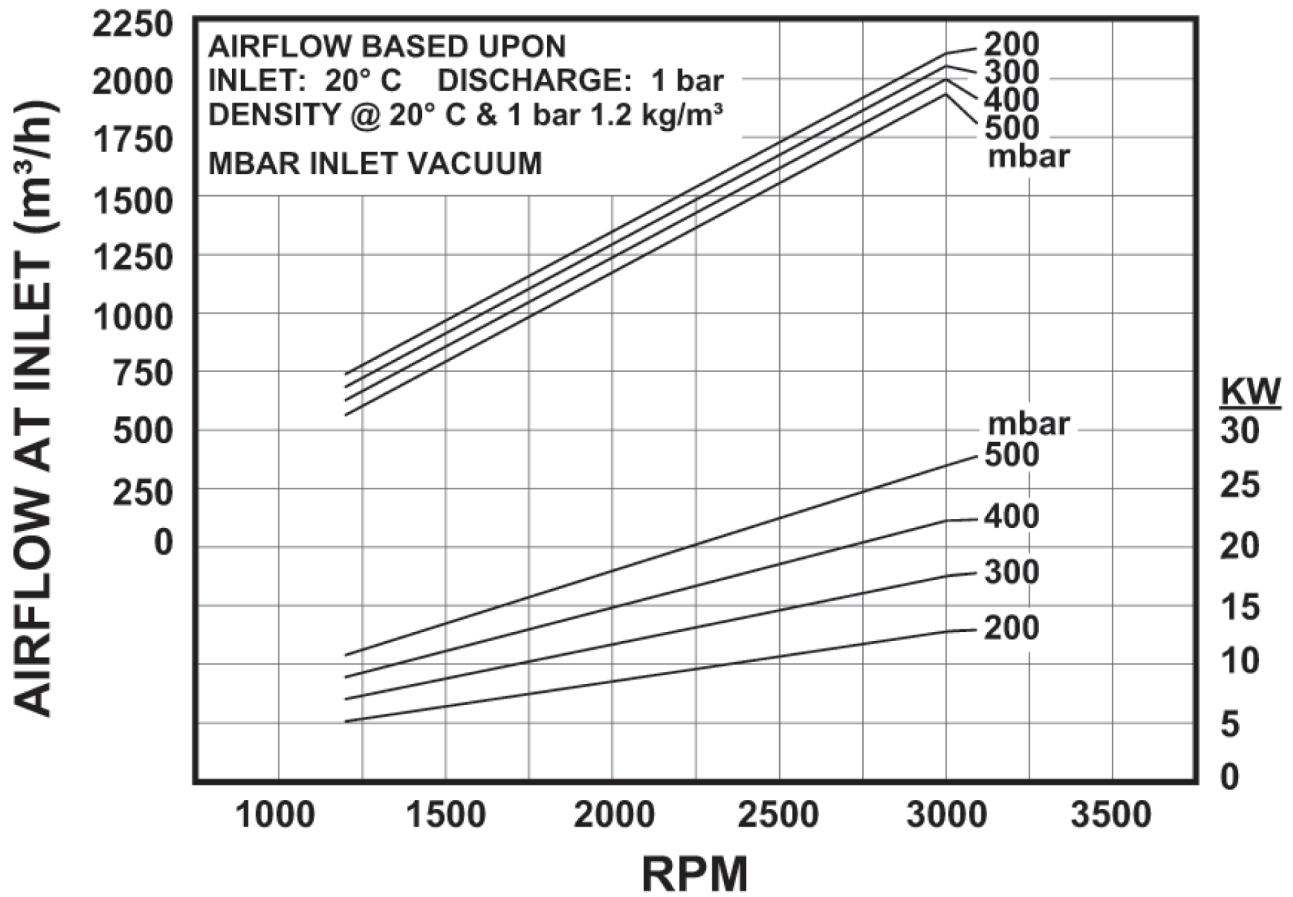


Figure 4-13 – T1050 / T1055 Vacuum Curve (Metric)

LUBRICATION

Every M-D Pneumatics blower is factory-tested, oil-drained, and shipped dry. Fill both oil reservoirs to the proper level before operation.

Every M-D Pneumatics Transport Blower is supplied with one gallon of MD PLUS full synthetic oil. Before filling the blower, check **Table 4-2** to confirm the amount of oil required.

For applications requiring food-grade lubricant, use only MD FG full synthetic oil.

Filling Procedure

To ensure the proper oil level, always use this filling procedure:

1. Remove the fill plugs from both gear end and drive end plates.
2. Slowly pour oil through fill until oil appears in the oil sight glass. **Bring the oil level to the center of the sight glass.**
3. Verify the oil level is at the proper level in both the gear end and drive end sight glasses.
4. Replace the fill plugs that were removed in step 1.

NOTICE

Never mix oil types or grades in a M-D Pneumatics Transport Blower. Mixing lubricants in the blower will result in gear and bearing failure.

CAUTION

Do not start the blower until you are certain that oil is in BOTH ends of the blower. Check BOTH sight glasses to ensure that oil levels are correct before starting. Operation of the blower without proper lubrication will cause the blower to fail and void its warranty.

WARNING

NEVER ATTEMPT TO CHANGE OIL WHILE THE BLOWER IS IN OPERATION. Failure to heed this warning will result in damage to equipment and/or serious personal injury. Oil level must be checked while the blower is not running and truck is parked on a level surface.

SHUR-MELT™ Thermal Relief Plugs

All T855, T855RS, and T1055 blowers are equipped with two patented thermal relief plugs. Upon temperature activation, the plugs will relieve 5 to 6 PSIG to protect the blower from damage. When replacing these plugs, you must ensure that a plug is installed on each end of the blower for complete protection.

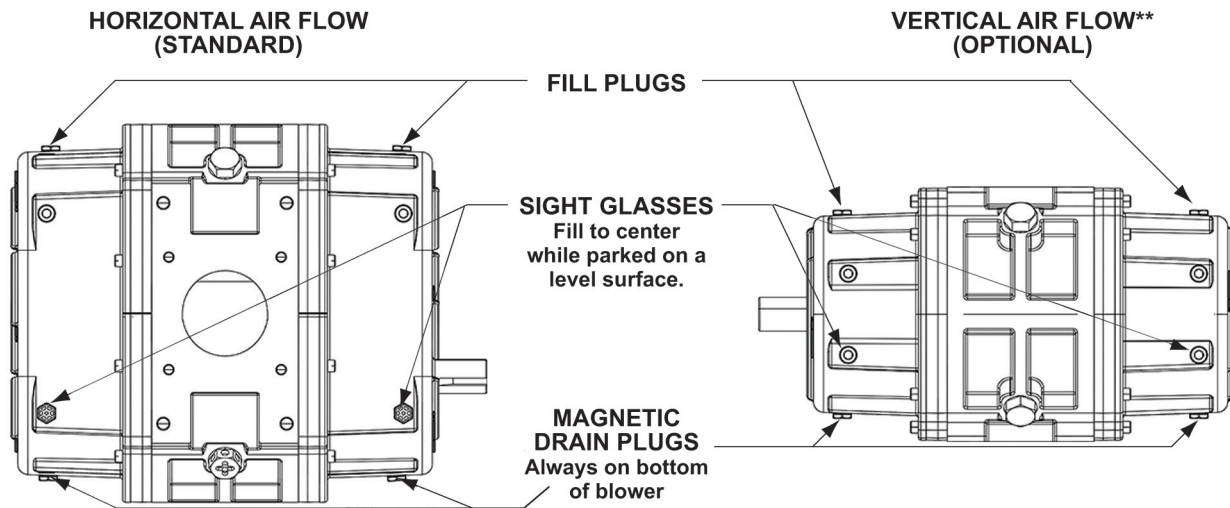


Figure 4-14 – Oil Fill Locations

NOTE: M-D Pneumatics MD oil is available from your authorized M-D Pneumatics Transport Channel Partner.

	HORIZONTAL AIR FLOW (STANDARD)	VERTICAL AIR FLOW (OPTIONAL)
Drive end	1.06 qt (1.0 L) (34 oz)	1.68 qt (1.59 L) (54 oz)
Non-drive (gear) end	1.0 qt (0.95 L) (32 oz)	1.75 qt (1.66 L) (56 oz)

Table 4-2 – Lubrication Capacities

NOTE: Oil capacities are based on filling from dry condition. Less oil may be needed depending on emptiness of oil reservoirs after draining.

05

OPERATION

1. Inspect the blower mounting, drive line, PTO, and air filter for damage.
2. Remove the camlock dust cap and connect the hot air hose.
3. Follow the trailer instructions regarding product hose connection and valve operation.
4. Slowly engage PTO with the engine at idle, bring it up to operating speed, and lock the engine at the recommended speed (shown in the cab).
5. Unload the trailer as per trailer manufacturer's recommendation. Do not exceed the maximum tank pressure.
6. While discharging, visually check the blower for vibration, mechanical noise or excessive heat.
7. If the relief valve is opening, adjust the proportioning valve to reduce the tank pressure.
8. Reduce pressure to zero as per the trailer manufacturer's instructions.
9. Disengage PTO. No cool-down period is required.
10. Disconnect the blower hose and replace the camlock dust cap.

! WARNING

The blower and accessories will become hot enough to cause serious skin burns on contact.



Rotating machinery is dangerous.



Always wear ear protection when near an operating blower.

NOTICE

Do not run at slower RPM to cool unit down. Slower RPM will produce heat.

MAINTENANCE

REGULAR MAINTENANCE

A well-designed maintenance program will add years of service to the blower.

Check a newly installed blower frequently during the first month of operation, especially lubrication. Check the oil level and add oil as needed. Complete oil changes are recommended annually, or more frequently depending on the operating conditions. The following is recommended as a minimum maintenance program. An oil analysis program is recommended.

DAILY	WEEKLY	MONTHLY	SEMIANNUALLY	AS NEEDED
<ol style="list-style-type: none"> 1. Check and maintain oil level, and add oil as necessary. 2. Check air filter restriction indicator. 	<ol style="list-style-type: none"> 1. Clean the air filter. A clogged air filter can seriously affect the efficiency of the blower and cause overheating and oil usage. 2. Check the relief valve to make sure it is operating properly. 	<ol style="list-style-type: none"> 1. Inspect the entire system for leaks. 2. Inspect the condition of the oil and change if necessary. 	<ol style="list-style-type: none"> 1. Inspect the drive line bearings. 	<ol style="list-style-type: none"> 1. Change oil as needed. Approximately every 1,000 hours.* <p><i>*T855RS has an oil change interval of up to 4,000 hours depending on operating conditions.</i></p>

BLOWER SERVICE & REPAIR

M-D Pneumatics transport blowers are manufactured and assembled to exacting standards to ensure optimum performance and

longevity. M-D Pneumatics recommends that only factory trained technicians perform major overhauls on its transport blowers. Call us or visit our website for the location of trained channel partners or to schedule a repair at our factory repair center.

07

RECOMMENDED LUBRICANTS

RECOMMENDED LUBRICANTS FOR BLOWERS AND VACUUM BOOSTERS

Positive displacement blowers and vacuum boosters require proper lubrication for bearings, seals and gears to operate effectively and efficiently. Oil is distributed from the oil reservoir to the critical components by means of oil slingers that are attached to the rotor shaft. In certain models of CP Series blowers, a high-performance grease rated for high temperatures is used on the drive-end bearings.

MD full synthetic lubricants are recommended for blowers and vacuum boosters. MD lubricants are specifically formulated using unique additives that provide maximum protection and extend the life of your product over mineral oils or semi-synthetic lubricants.

MD oils are suitable for a wide range of operating temperatures that are based on model, operating speed and discharge temperature of the product.

FOR OXYGEN-ENRICHED SERVICE

Blowers and vacuum boosters operated in oxygen enriched applications should only use non-flammable, PFPE full synthetic lubricants. Blowers and vacuum boosters used in hydrogen service should only MD full synthetic oil

NOTE: Oxygen-enriched service only applicable for PD Plus blowers and vacuum boosters.

WARNING

Do not overfill the oil sumps. Overfilling can result in gear damage or oil leaks.

CAUTION

Units are shipped without oil in the sumps. Ensure adequate oil has been added before operating.

CAUTION

M-D Pneumatics and Kinney does not accept responsibility for damage caused by use of lubricants that are not recommended by M-D Pneumatics and Kinney.

MD BLOWER & BOOSTER LUBRICANTS SPECIFICATIONS:				
PRODUCTS	MD ONE	MD PLUS	MD MAX	MD FG
VISCOSITY INDEX	150	154	157	141
@40°C, CST	99.1	231.7	340.9	99.3
@100°C, CST	14.4	27.6	37.2	13.9
FLASH POINT °F (°C)	510 (266)	480 (249)	491 (255)	515 (268)
POUR POINT °F (°C)	- 44 (-43)	-49 (-45)	-54 (-48)	-60 (-51)

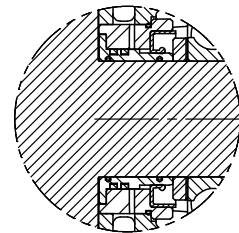
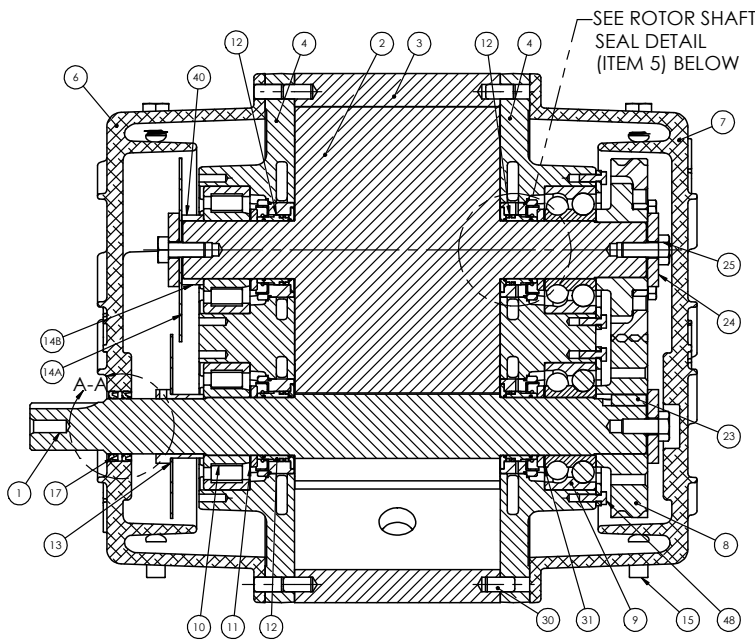
NOTE: MD One Vapor Pressure: (mm Hg) 100°F <0.00004; 200°F <0.00018

MD BLOWER & BOOSTER LUBRICANTS OPTIONS					
MD OIL TYPE	1 QUART	1 GALLON	5 GALLON	55 GALLON BARREL	CASE 12 QUARTS
MD ONE	16444-MD1-Q	16444-MD1-G	16444-MD1-5G	16444-MD1-B	16444-MD1-Q-C
MD PLUS	16444-MD2-Q	16444-MD2-G	16444-MD2-5G	16444-MD2-B	16444-MD2-Q-C
MD MAX	16444-MD3-Q	16444-MD3-G	16444-MD3-5G	16444-MD3-B	16444-MD3-Q-C
MD FG	16444-MD1-Q-FG	16444-MD1-G-FG	16444-MD1-5G-FG	16444-MD1-B-FG	16444-MD1-Q-C-FG

08

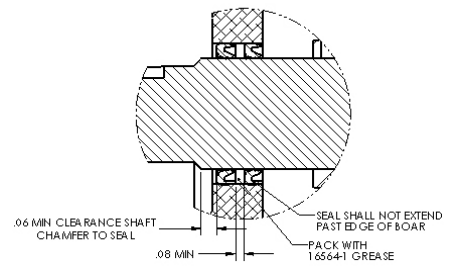
ASSEMBLY DRAWING AND PARTS LIST

ASSEMBLY DRAWING

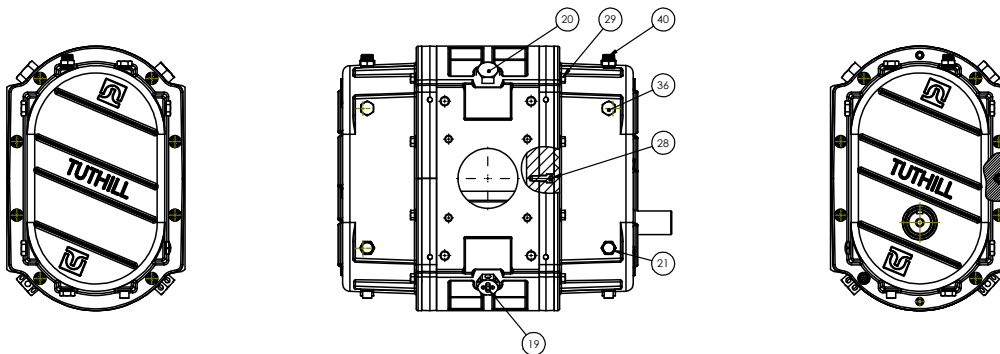


ROTOR SHAFT SEAL DETAIL (ITEM 5)

STANDARD
PISTON/SLINGER SEAL
ASSEMBLY



A-A
SCALE 1 : 1
DRIVE SHAFT SEAL DETAIL



PARTS LIST

ITEM NO.	PART DESCRIPTION	QTY
1	ROTOR DRIVE MACH D.I. T850	1
2	ROTOR, DRIVEN, MACHINE, D.I., T850	1
3	HOUSING, MACHINE, C.I., T850	1
4	ENDPLATE MACHINE,C.I., T855/1055	2
6	COVER,MACHINE DE, ALUMINUM, T855/1055	1
7	COVER,MACHINE GE,ALUMINUM, T855/1055	1
8	GEAR ASSEMBLY	1
9	BEARING, BALL, 2 ROW	2
10	BEARING, ROLL CYLINDER, T850	2
11	SHIM, BEARING, 2.000 ID X 0.025 THICK	2
12	SEAL ASSEMBLY PISTON RING/LIP, VITON	4
13	OIL SLINGER ASSEMBLY, DRIVE	1
15	PLUG, MAGNETIC, 1/2 SQUARE HEAD	2
17	SEAL, TRIPLE LIP, VITON, 1.875 I.D.	2
19	PLUG, MELT, 360 DEGREES	2
20	PLUG, TRUCK BLOWER BLANK	2
21	OIL SIGHT GAGE, 1/2 NPT GLASS, QX/TRK	2
23	KEY, GEAR TIMING	2
24	WASHER, ROTOR SHAFT	3
25	SCREW, CAP, HEX HEAD, 1/2 X 1-1/4	3
28	SCREW, CAP, SOCKET HEAD, 3/8	20
29	SCREW,FLANGE HEAD,3/8-16X1",THREAD LOCK	16
30	PIN, DOWEL, 1/2 X 1	6
36	PLUG, PIPE, 1/2 HEX, STEEL	10
40	BREATHER BUSHING ASSY IP69K	2
42	NAMEPLATE	1
43	DOWEL, 1/2 X 1 5/8	2
44	KEY, 3/8 SQUARE X 1 5/8	1
45	SCREW, LOCK, T850	2
47	SCREW, SET, 6MM X 12MM	2
48	SCREW, CAP, HEX HEAD, 5/16	8
49	BEARING RETAINER, T855/1055	2
14A	SLINGER,DRIVEN,T855 T1055	1
14B	SPACER, OIL, SLINGER, DRIVEN, T855,T1055	1

ITEM NO.	PART DESCRIPTION	QTY
31C	SHIM, BEARING, 2.000 ID X 0.003 THICK	2
31D	SHIM, BEARING, 2.000 ID X 0.004 THICK	4
31E	SHIM, BEARING, 2.000 ID X 0.005 THICK	2

61580 Service Kit for T855 / T1055

ITEM / PART #	PART DESCRIPTION	QTY
9	BEARING, BALL, 2 ROW	2
10	BEARING, ROLL CYLINDER, T850	2
11	SHIM, BEARING, 2.000 ID X 0.025 THICK	2
12	SEAL ASSEMBLY PISTON RING/LIP, VITON	4
17	SEAL, TRIPLE LIP, VITON, 1.875 I.D.	2
40	BREATHER BUSHING ASSY IP69K	2
31C	SHIM, BEARING, 2.000 ID X 0.003 THICK	2
31D	SHIM, BEARING, 2.000 ID X 0.004 THICK	4
31E	SHIM, BEARING, 2.000 ID X 0.005 THICK	2
23	KEY, GEAR TIMING	2
60044	SHIM, ADJUSTABLE	1
61518	GASKET, PORT, T850/T1050, NA1100	2

61484 Service Kit for T850 / T1050

PART #	PART DESCRIPTION	QTY
ALL PARTS LISTED ABOVE FOR 61580 SERVICE KIT ARE INCLUDED, AS WELL AS THE FOLLOWING:		
61287	GASKET, T850	2

61590 Mounting Adaptor Plate Kit for T855 / T855RS

ITEM /PART #	PART DESCRIPTION	QTY
RS61258-121	DRIVE ROTOR	1
RS61259-121	DRIVEN ROTOR	1
61587	ADAPTOR PLATE	1
61589	BOLT KIT	1
61518	GASKET	1

WARRANTY – TRANSPORT BLOWERS

Subject to the terms and conditions hereinafter set forth and set forth in General Terms of Sale, M-D Pneumatics (the Seller) warrants products and parts of its manufacture, when shipped, and its work (including installation and startup) when performed, will be of good quality and will be free from defects in material and workmanship. This warranty applies only to Seller's equipment, under use and service in accordance with Seller's written instructions, recommendations and ratings for installation, operating, maintenance and service of products, for a period as stated in the table below. Because of varying conditions of installation and operation, all guarantees of performance are subject to plus or minus 5% variation. (Non-standard materials are subject to a plus or minus 10% variation)

PRODUCT TYPE	WARRANTY DURATION
New	18 months from date of shipment, or 12 months after initial startup date, whichever occurs first
Remanufactured	12 months from date of shipment, or 12 months after initial startup date, whichever occurs first
Repair	12 months from date of shipment, or remaining warranty period, whichever is greater

THIS WARRANTY EXTENDS ONLY TO BUYER AND/OR ORIGINAL END USER, AND IN NO EVENT SHALL THE SELLER BE LIABLE FOR PROPERTY DAMAGE SUSTAINED BY A PERSON DESIGNATED BY THE LAW OF ANY JURISDICTION AS A THIRD PARTY BENEFICIARY OF THIS WARRANTY OR ANY OTHER WARRANTY HELD TO SURVIVE SELLER'S DISCLAIMER.

All accessories furnished by Seller but manufactured by others bear only that manufacturer's standard warranty.

All claims for defective products, parts, or work under this warranty must be made in writing immediately upon discovery and, in any event within one (1) year from date of shipment of the applicable item and all claims for defective work must be made in writing immediately upon discovery and in any event within one (1) year from date of completion thereof by Seller. Unless done with prior written consent of Seller, any repairs, alterations or disassembly of Seller's equipment shall void warranty. Installation and transportation costs are not included and defective items must be held for Seller's inspection and returned to Seller's Ex-works point upon request.

THERE ARE NO WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS OF PURPOSE.

After Buyer's submission of a claim as provided above and its approval, Seller shall at its option either repair or replace its product, part, or work at the original Ex-works point of shipment, or refund an equitable portion of the purchase price.

The products and parts sold hereunder are not warranted for operation with erosive or corrosive material or those which may lead to build up of material within the product supplied, nor those which are incompatible with the materials of construction. The Buyer shall have no claim whatsoever and no product or part shall be deemed to be defective by reason of failure to resist erosive or corrosive action nor for problems resulting from build-up of material within the unit nor for problems due to incompatibility with the materials of construction.

Any improper use, operation beyond capacity, substitution of parts not approved by Seller, or any alteration or repair by others in such manner as in Seller's judgment affects the product materially and adversely shall void this warranty.

No employee or representative of Seller other than an Officer of the Company is authorized to change this warranty in any way or grant any other warranty. Any such change by an Officer of the Company must be in writing.

The foregoing is Seller's only obligation and Buyer's only remedy for breach of warranty, and except for gross negligence, willful misconduct and remedies permitted under the General Terms of Sale in the sections on CONTRACT PERFORMANCE, INSPECTION AND ACCEPTANCE and the PATENTS Clause hereof, the foregoing is BUYER'S ONLY REMEDY HEREUNDER BY WAY OF BREACH OF CONTRACT, TORT OR OTHERWISE, WITHOUT REGARD TO WHETHER ANY DEFECT WAS DISCOVERED OR LATENT AT THE TIME OF DELIVERY OF THE PRODUCT OR WORK. In no event shall Buyer be entitled to incidental or consequential damages. Any action for breach of this agreement must commence within one (1) year after the cause of action has occurred.

January 2005

OPERATING DATA FORM / PRODUCT REGISTRATION

It is to the user's advantage to have the requested data filled in below and available in the event a problem should develop in the blower or the system. This information is also helpful when ordering spare parts.

Model No.	_____	V-Belt Size	_____	Length	_____
Serial No.	_____	Type of Lubrication	_____		
Start-up Date	_____		_____		
Pump RPM	_____	Operating Vacuum	_____		
Pump Sheave Diameter	_____	Any Other Special Accessories Supplied or in Use:			
Motor Sheave Diameter	_____	_____			
Motor RPM	_____	HP	_____	_____	
PTO Manufacturer	_____		_____		
PTO Model	_____		_____		
PTO Ratio	_____		_____		

NOTES:

IMPORTANT

All blowers manufactured by M-D Pneumatics are date coded at time of shipment. In order to assure you of the full benefits of the product warranty, please complete, tear out and return the product registration card. You may also register your product online at www.md pneumatics.com or contact Customer Service.

M-D Pneumatics®

**For Service & Repair, Technical
Support, or Product Sales contact:**

David Blackwell
Channel Partner Representative

1361 Mountain View Circle
Azusa, California 91702

T :: 626.385.3516
C :: 626.208.6940
E :: david@ptbsales.com
www.ptbsales.com



Manual 2023 Rev G p/n 002023 0000

04/21