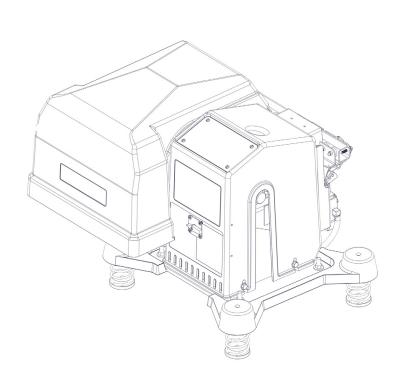
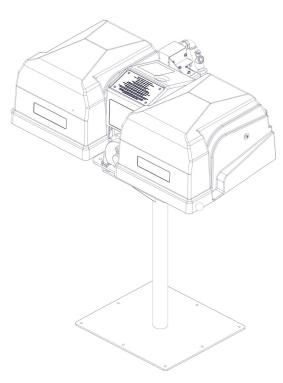
# Owner's Manual: 1400 & 1410 Air & Explosion

One-Gallon Shaker

Models 1400-A1, 1410-A1, 1400-X1



1410-A1 on Counter Base (5153-00)



1400-X1 on Pedestal Base (5152-00)



Air & Explosion

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#### 1. Safety Information

Review this owner's manual and read all warning labels on the machine prior to use. The three main safety notifications used in this manual and on the warning labels are **WARNING**, **CAUTION** and **NOTICE**. They have specific meanings and indicate the potential dangers from misuse of the machine.



"WARNING!" indicates a hazardous situation, which, if not avoided, could result in death or serious injury. These serious injuries could include permanent loss of function or significant disfigurement, disability, considerable pain and suffering, amputations, severe burns, and loss or impairment of vision or hearing. Take all necessary precautions to avoid unnecessary injury.



**"CAUTION!"** indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.



"NOTICE" indicates practices that do not involve physical injury but may damage the machine.

Safety Information, Continued..

#### 1.1 Safety Precaution labels



### WARNING ADVERTENCIA AVERTISSEMENT

- Machine must be properly grounded before use; improper grounding could cause electric shock and injury.
- -Disconnect power cord before servicing, cleaning or removing any cover, and follow lockout/ tagout procedures in owner manual; failure to disconnect power could cause electric shock and injury.
- -Review Owners Manual before installing or operating.
- La maquinaria debe ser apoyada correctamente en el suelo antes de usar, el no apoyarla puede casuar choque elèctrico y daños.
- -Desconecte la energía antes de dar mantenimiento, limpiar o quitar caulquier cubierta, y siga los procedimientos de bloqueo/etiquetado del manual, Fallar en desconectar puede causar choque eléctrico y daños.
- Revise el manual del usuario antes de instalar u operar.
- La machine doit e'tre correctement mis a' la terre avant de les utilizer mise a' la terre incorrecte peut provoquer un choc e'lectrique et de blessure.
- De'branchez le cordon d'alimentation avant de proce'der a'l'entretien, le nettoyage ou le retrait des capots: suivez la proce'dure d'isolation/consignation proce'dures dans le manul de l'opre'rateur; E'chec de de'brancher la source d'alimentation peut provoquer shock and e'lectrique blessyres.
- -Re'examiner le fonctionnement manuel avant l'installation.

Part No. 1781570

#### **A** CAUTION **A**

AIR SUPPLY NOTTO EXCEED 150 PSI MINIMUM AIR SUPPLY REQUIREMENT IS 80 PSI

EL SUMINISTRO DE AIRE NO DEBE EXCEDER LOS 150 PSI MÍNIMO REQUISTIO DE SUMINISTRO DE AIRE ES DE 80 PSI LA PRESSION DE L'ALIMENTATION EN AIR NE DOIT PAS DÉPASSER 1034 KPA (150LB/PO)

LA PRESSION MINIMALE DE L'ALIMENTATION EN AIR EST DE 551,6 KPA (80 LB/PO)

> Part No. 1780668 1400 & 1410-A1 only

CAUTION MOVING PARTS INSIDE	AVERTISSEMENT LES PARTIES EN MOUVEMENT À L'INTERIEUR DE LA MACHINE	PRECAUCIÓN PIEZAS MÓVILES ADENTRO
- Do not operate with safety guard open.	- Ne pas mettre en service si le dispositif de protection est ouvert.	- No operar con el protector de seguridad abierto.
- Do not open safety guard until machine comes to a complete stop.	- Ne pas ouvrir le dispositif de protection avant l'immobilisation complete de la machine.	- No abrir el protector de seguridad hasta que la màquina este completamente parada.

Part No. 1785065

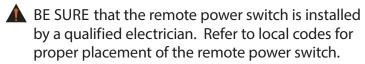
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Safety Information, Continued..

#### 1.2 Safety Precaution Summary

#### **WARNING!**



A Review this owner's manual before installing or operating.

The machine must be properly grounded prior to use. In the case of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

⚠ Check with a qualified electrician if you don't completely understand these grounding instructions, or if you are not sure whether the machine is properly grounded.

Follow the lockout/tagout procedures of your company.

▲ DO NOT open the door until the machine comes to a complete stop.

Review product label, Material Safety Data Sheet, and HMIS rating of materials prior to mixing to determine potential hazards.

Do not use solvent-based cleaners or thinners.

WARNING: This product may expose you to chemicals including DEHP, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

#### **A** CAUTION!

Keep the work area free of clutter and electrical cords.

**DO NOT** disable the limit switch. This switch interrupts power when the mixer door is opened

Avoid extension cords. To minimize the risk of improper electrical grounding, extension cords are not recommended. If an extension cords are not recommended. If an extension cord is unavoidable, consult a qualified electrician to determine what type of extension cord will satisfy the grounding, current capacity, and other requirements of the particular situation.

Use the proper power source. Refer to the machine data plate on the right side panel or the section 2.1, Specifications, in this manual.

Keep customers away from the work area. This machine should be used only by properly trained individuals.

Clamp the can carefully to ensure that it is held securely during the mixing cycle.

Product safety labels should be inspected and cleaned periodically to maintain good legibility. Replace any labels that are no longer legible.

#### 2. Introduction

#### 2.1 Application

Congratulations on your purchase of the Classic Shaker. This machine is designed to accommodate standard gallon, quart and pint plastic or metal cans weighing up to 18 lb. (8.2 kg).

This mixer **MUST BE USED** in conjunction with either a countertop or pedestal base, sold separately.

Understand your machine's features and proper operation to take full advantage of its capabilities.

Read this entire manual completely before operating the machine. Practice installing and removing a container before mixing for the first time.

Keep this manual for future reference.

Always follow all safety instructions!

#### 2.2 Specifications

#### **Unit Size**

- 1400-A1 W 41.63 in. (105.74 cm) D 32.25 in. (75.26 cm) H 31.50 in. (80.01 cm)
- **1410-A1, W** 27.88 in. (70.81 cm) **D** 29.63 in. (75.26 cm) **H** 31.5 in. (80.01 cm)
- 1400-X1

#### **Shipping Weight:**

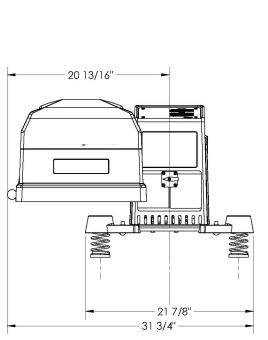
- **1400-A1, 1400-X1,:** 192 lb. (87.1 kg)
- **1410-A1:** 152 lb. (68.9 kg)

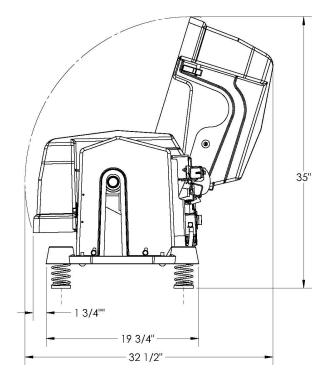
Electric Service: 120 V 60 Hz (-X1)

Air Service: 10 CFM, Min. 80 PSI, Max 150 PSI (-A1)

Capacity: 18 lb. (8.2 kg) per clamp Sizes Mixed: 1 gal., 1 gt., 1 pt.

**1400 & 1410-A1** Mounted on either Pedestal or Counter Top bases. **1400-X1** Mounted on pedestal base only



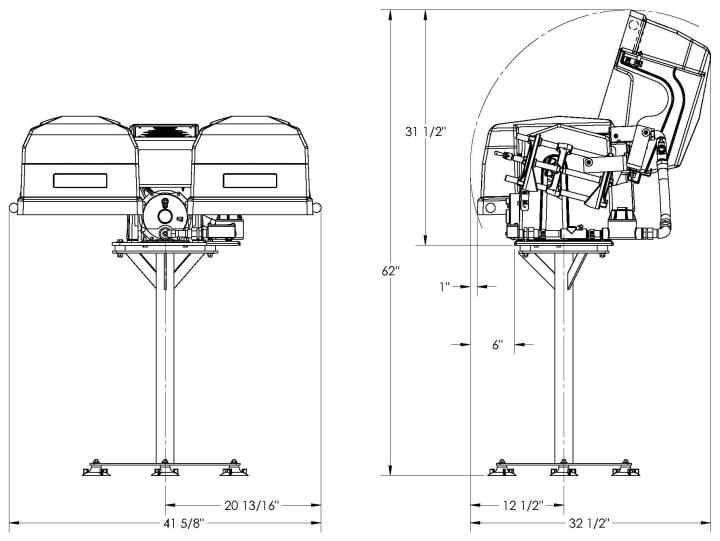


Single Gallon

**1410-A1** No Timer

Air & Explosion

#### 2.2 Specifications Continued



**Twin Gallon** 

**1410-A1** No Timer 1400-X1 120V / 60Hz No Timer

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#### 3. Assemble and Test

#### 3.1 Prepare for Use

IMPORTANT: Before attempting to operate the machine:

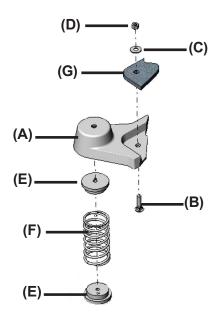
- Remove all packing material from the unit.
- Remove all packing material from the base.

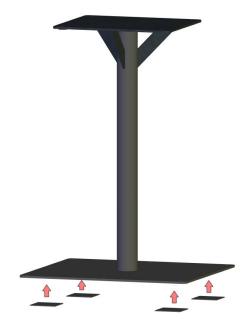
#### 3.2 Assemble the Countertop Base (See Section 8.10)

#### **NOT FOR USE WITH 1400-X1**

- 1. Attach both base castings (A) to the mixer, using the four carriage bolts (B), washers (C), and nuts (D) provided.
- 2. Install a rubber foot **(E)** into each end of the springs (F).
- 3. Lift one side of the mixer. Insert a spring and foot assembly into the depression in the bottom of each corner of the base (G).
- 4. Lift the other side of the mixer, and repeat the third step.

**NOTE:** Be sure that the machine and base are placed on a flat, stable countertop surface.





#### 3.3 Assemble the Pedestal Base (See Section 8.11)

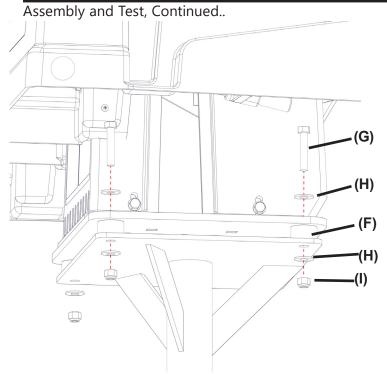
1. Wipe bottom of pedestal base with alcohol, acetone, or equivalent.

- 2. Sweep floor and wipe with alcohol, acetone, or equivalent.
- 3. Adhere VHB pads (4) to bottom of pedestal base as shown above.
- 4. Place pedestal base on clean floor.

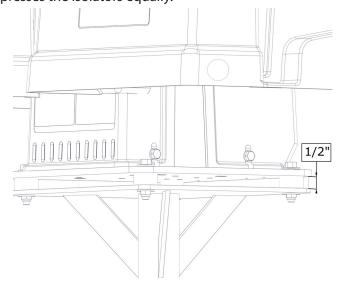
**NOTE:** Moving Pedestal Base: If it becomes necessary to move the machine to a different location, release the bond between the floor and pedestal base by inserting a wall scraper between them. Contact Red Devil Equipment Co. / Radia for replacement VHB pads.

Notice: Failure to follow the directions laid out in this Section will cause the warranty to be void. Per Section 10: "This warranty does not cover, and Radia shall not be liable for, any malfunction, damage, or wear caused by faulty installation"

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- 1. Hand tighten first, then tighten the nuts one complete turn with a wrench.
- 2. Align the openings of the rubber bumpers **(C)** over those on the upper plate of the base.
- 3. Set the mixer on the upper plate of the base, on top of the rubber bumpers **(C)**.
- 4. Secure the mixer to the base using the four rubber bumpers, bolts **(A)**, washers **(B)**, and nuts **(E)** provided.
- 5. Adjust the fasteners.
  - a. Tighten all four bolts to just snug
  - **b.** Turn all four bolt 1 1/2 more turns.
  - **c.** Adjust the bolts as required to ensure the gap between the mounting base and the unit is 1/2" at all four bolts. This compresses the isolators equally.



#### 3.4 Valve Cap Removal

#### 1. Remove the Valve Cap prior to operation.



#### 3.5 Connect to Power

#### 1. X1 machines

Follow the electrical instructions described in sections 1.2 & 2.2

#### 2. A1 machines

Connect a 10 CFM air supply to the inlet side of the filter regulator. The air supply must be at least 80 PSI to reliably operate the machine, and **MUST NOT EXCEED** 150 PSI.

The Lubricator requires air tool oil. It is shipped without oil to prevent leaking during shipment. See Section 5.4.



Lubricator

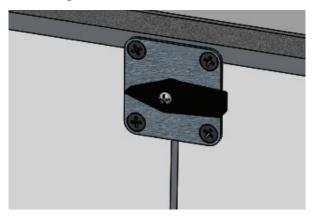
#### 4. Operation

#### 4.1 Install a Pail and Mix

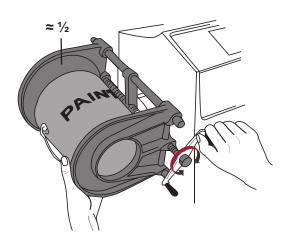
- 1. Turn the handle counter-clockwise to open the clamping jaws about 1/2" wider than the length of the container.
- 2. Insert the can and turn the handle clockwise to secure the can for mixing. Before turning on the mixer, always be sure that the container is held tightly-but don't use excessive pressure that could damage the can or clamping assembly.

A Notice: Avoid damage to the machine. Do not operate the machine without a can installed in a clamp..

- 3. If mixing with only one clamp on a Model 1400, install an empty can (or a piece of  $2'' \times 4''$  board) in the other clamp.
- 4. Close the guards to activate the air switch.



- 5. For Air models turn the Flow Control Valve on for the desired amount of time
- 6. For Explosion proof models, turn the power on at the remote power switch for the desired amount of time.



#### 5. Care & Maintenance

**WARNING!** Avoid serious personal injury. Always turn the power off before performing maintenance tasks.

Disconnect the air for air operated models and bleed air pressure from the mixer.

#### 5.1 Cleaning

- Remove water-based/glycol colorants or base paints spilled on machine surfaces using lukewarm water and mild detergent.
- Do not use abrasives to clean machine surfaces.
   Doing so may damage the appearance of the machine.
- Keep the machine clean for reliable operation.

#### 5.2 Maintenance (All Models)

#### Lubrication:

- Measure the oil level periodically. Be sure the oil level is between the two marks on the dip stick.
   Use a good grade SAE 10W 30 motor oil.
- Avoid using too much oil as it could cause seepage around the main shaft. The capacity of the transmission is 10 oz.
- Keep the guide rods free of dirt, dried paint, and other foreign matter.
- · Remove any small nicks with a fine file.
- Whenever the guide rods feel dry, wipe a little oil over them with a rag.
- Occasionally apply a thin film of oil to the clamp screws.

#### 5.3 Maintenance (1400-X1)

Belt tension (1400-X1)

 Maintain the belt tension. To adjust, loosen the two screws on the idler support bracket. Slide the idler to tighten the belt, then retighten the screws.

#### 5.4 Maintenance (Air Models)

CAUTION - ALWAYS SHUT OFF THE AIR SUPPLY LINE AND BLEED THE AIR PRESSURE FROM THE MIXER BEFORE SERVICING!

1. Drain the filter of accumulated water as often as required.

NOTE: FAILURE TO DRAIN THE FILTER CAN RESULT IN MOTOR FAILURE. CHECK AND DRAIN THE FILTER REGULARLY.

- a. Push pin at bottom of filter bowl to drain water (Figure 1).
- 2. Change the air filter element (Radia part #9787499) when it becomes dirty or when the shake speed of the mixer becomes slow.
  - a. Remove the bowl from the Filter Regulator (Figure 2).
  - b. Twist of the disc shaped end piece and then replace the cylinder shaped filter. (Figure 3)
- 3. Refill the Air Lubricator

NOTE: FAILURE TO KEEP THE MIXER
PROPERLY LUBRICATED CAN RESULT IN FAILURE
OF THE AIR MOTOR. CHECK THE OIL LEVEL REGULARLY.

- a. Remove the lubricator bowl (Figure 2)
- b. Fill the bowl with air tool oil to 1/4" to top of the bowl
- Reinstall the bowl to the air lubricator
- 4. Adjust the drip rate of the air lubricator.

NOTE: INADEQUATE LUBRICATION CAN
RESULT IN PRE-MATURE FAILURE OF THE
MOTOR. OVER LUBRICATION CAN LEAD TO EXCESSIVE OIL DRIP FROM THE MUFFLER OR CLOGGING
THE MOTOR.

a. Turn the clear knob on top of the lubricator to maintain a drip rate of 1 drop every 1-2 minutes.



Fig. 1: Draining accumulated water in air filter



Fig. 2: Removing the regulator or lubricator bowl



Fig. 3: Replacing air filter

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#### 6. Troubleshooting

PROBLEM	CAUSE	REMEDY
	Not connected to power source	Connect to power source
	Loose or broken wire connection	Have a qualified electrician replace or repair the wire connection
	Limit switch actuator does not make contact with limit switch	Readjust switch to make contact with limit switch screw when the cover is closed
	Mixer guard is not closed completely	Remove any obstruction and close the guard properly
Mixer will not operate	Motor thermal protector activated	Allow to cool, then restart
	Faulty Remote Switch/Air Switch	Contact Red Devil Equipment Co. Customer Care
	Faulty motor	Contact Red Devil Equipment Co. Customer Care
	Air pressure low or restricted	Check air supply lines
	Air lubricator not dripping oil.	Re-fill oil reservoir, adjust drip rate, or replace o-ring.
Pail won't fit properly into clamping plates	Pail damaged	Fix or replace pail
Clamp does not hold cans securely	Clamp threads are worn	Replace the clamp assembly
Mixer does not shut off at the end of a mixing cycle	Faulty Remote Switch/Air Switch	Contact Red Devil Equipment Co. Customer Care
Mixer does not shut off when guards are lifted	Faulty Limit Switch/Air Switch	Contact Red Devil Equipment Co. Customer Care
Mixer walking	Machine is not on a Red Devil Equipment Co. approved base	Contact Red Devil Equipment Co. Customer Care to order a base
	Floor is not smooth	Anchor base to the floor, see section 3.5
	Loose nuts on the mounting base.	Tighten the nuts.
	Guards are loose	Tighten the nuts.
Excessive noise	Clamp plate loose	Contact Red Devil Equipment Co. Customer Care
	Worn transmission bearings	Replace transmission assembly
	Loose drive belt	Tighten or replace drive belt
Mixer starts slowly or runs	Air pressure low or restricted	Check air supply lines.
slowly	Air lubricator not dripping oil	Re-fill oil reservoir, adjust drip rate, replace o-ring.
	Dirty or clogged air filter	Replace air filter



GROUND

GREEN

## 7. Wiring 7.1 1400-X1

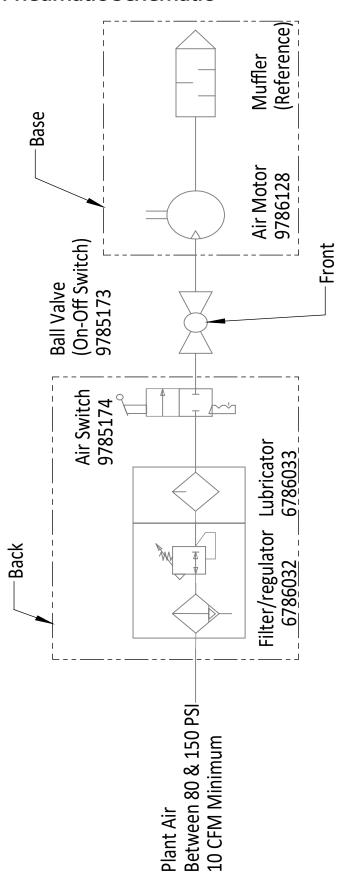
#### THERMAL O/L MOTOR AND RELAY WIRING DETAIL FROM MACHINE CONDULET BODY, L 9785153 MEDIUM WIRE NUT EXPLOSION PROOF MOTOR 5784615 4X 9780542 BROWN BLACK GREEN RED 5784065 LIMIT SWITCH (N/O) CONDUIT BOX, T 9785155 5785162 BROWN 5785163 WHITE 5785164 GREEN 5785165 B/W 5785161 RED 120V 5784622 5785167 GREEN RELAY 5785166 BLUE 5785183 WIRE HARNESS 5782649 GREEN 9780542 MEDIUM WIRE NUT BROWN WHITE GREEN BLUE RED PART NUMBER 5784642 9780543 LARGE WIRE NUT RED STOP P/B (N/C) CONTROL STATION -SUPPLY FUSE OR BREAKER PUSH BUTTON LINE 2 LINE 1 S GREEN START P/B (N/O) BLACK WHITE

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...Wiring Diagrams, Continued

#### 7.3 1400 & 1410-A1 Pneumatic Schematic

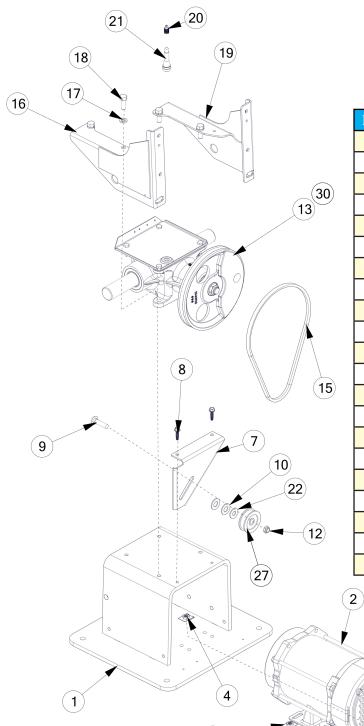




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#### 8. Exploded Views

#### 8.1 Drive System 1400-X1



BOM ID	PART#	DESCRIPTION
1	8621200	BASE WELDMENT 54XX
2	5784615	MOTOR 1/3 HP EXPLOSION PROOF
3	9561700	SCREW HEX 5/16 X 1
4	9615100	NUT, RETAINING, J-TYPE 5/16-18
5	8788400	PULLEY, EXP. PROOF, 60HZ MOTOR - 54XX
6	9159800	SCREW, SET, 1/4-20 X .50, CUP PT
7	9785210	BRACKET, IDLER - 1400 X1
8	9621900	SCREW, HEX WASHER HD, 1/4-20 X 1.00 TC TYPE F
9	9190800	CARRIAGE BOLT 3/8-16 X 1.50
10	9782995	WASHER, FLAT, 1/2 X 1.06 OD
12	9783951	NUT, 3/8-16 JAM NYLON LOCK
13	6785273	TRANSMISSION KIT 1400
15	9160500	BELT, V
16	9785062	HINGE BRACKET, TRANS RIGHT - 14XX
17	9780402	WASHER 3/8 SPLIT RING LOCKING
18	9780886	SCREW HEX 3/8-16 X 1.00
19	9785061	HINGE BRACKET, TRANS LEFT - 14XX
20	9622600	CAP, SHRADER VALVE, NYLON - 54XX
21	9622800	VALVE STEM
22	9161100	WASHER, FLAT 3/8 USS
27	6785275	TENSIONER, PULLEY

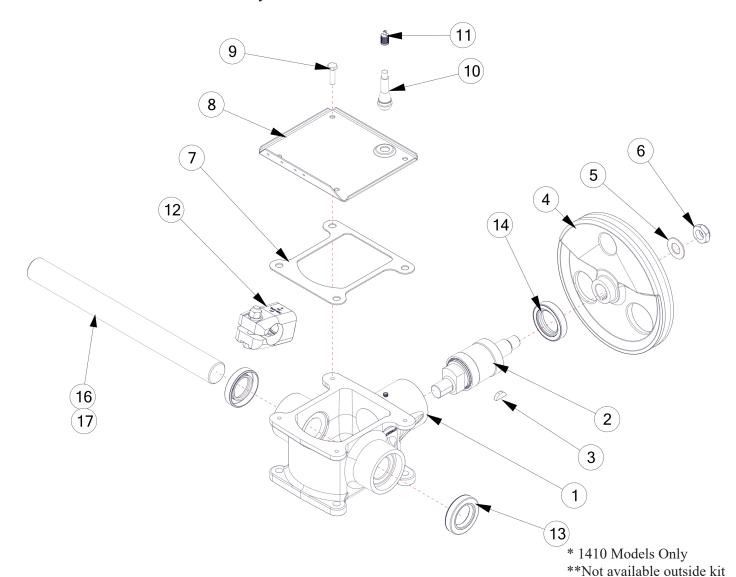
PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued

#### 8.2 Transmission Assembly



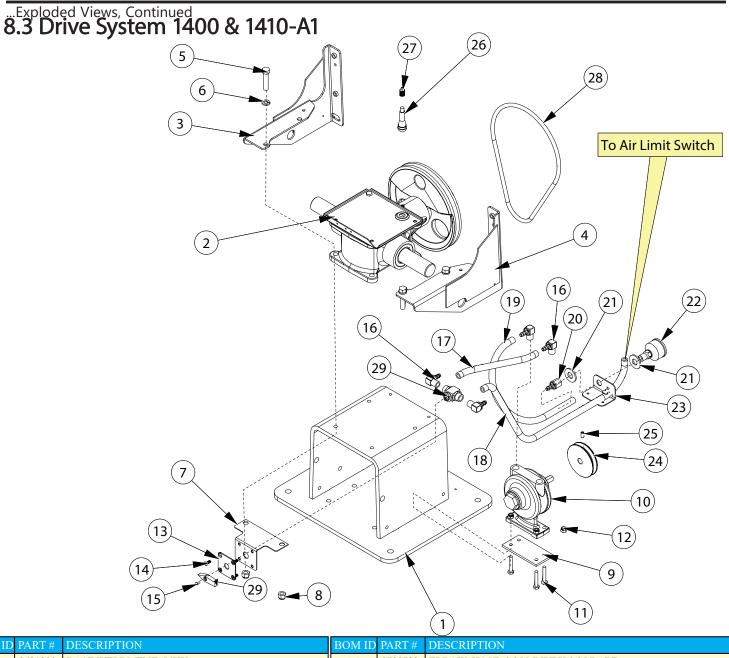
BOM ID	PART #	DESCRIPTION	BOM ID	PART #	DESCRIPTION
1**	9786258	MACHINING, BEARING HOUSING - 14XX	10	9622800	VALVE STEM
2**	6808900	ASSY, CRANKSHAFT - 54XX	11	9622600	CAP, SCHRADER VALVE, NYLON - 54XX
3	9124700	KEY, WOODRUFF, NO. 606	12**	6803200	BLOCK, UNIVERSAL ASSY - 14XX
1	0604000	DULLEY COUNTEDWEIGHT 54VV	1.2	0157400	SEAL OIL ACITATOD SHAFT

5	9690300	WASHER, COPPER, FLAT	14	9359200	SEAL, OIL, CRANKSHAFT
6	9694100	NUT, NYLON LOCK, THIN, 0.635-18	16**	9341700	SHAFT, AGITATOR, DUAL - 5400
7	9430300	GASKET, BEARING HOUSING - 54XX	17**	9339600	SHAFT, AGITATOR, SINGLE *
8	9668300	COVER, BEARING HOUSING - 54XX	KIT	6785273	1400 TRANSMISSION ASSEMBLY
9	9788039	SCREW, HEX 1 4 X 1 GR8ZP PATCH	KIT*	6785275	1410 TRANSMISSION ASSEMBLY

PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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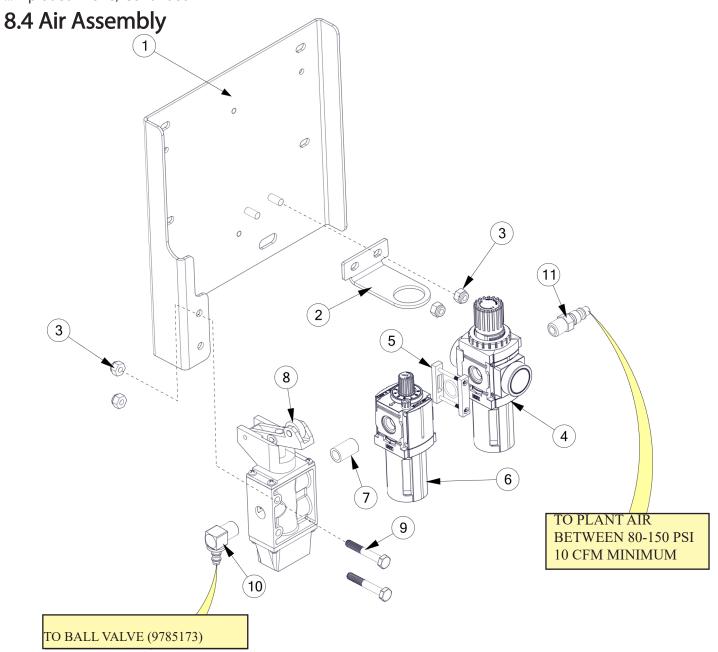
BOM ID	PART#	DESCRIPTION	BOM ID	PART#	DESCRIPTION
1	8621200	BASE WELDMENT, 54XX	16	9780732	ELBOW, HOSE, 0.25 MNPT X 0.25 BARB
2	6785273	TRANSMISSION ASSY, 1400	17	9786121	HOSE, AIR, VALVE TO MOTOR - 14XX A1
3	9785061	HINGE BRACKET, TRANS LEFT - 14XX	18	9785178	HOSE, AIR, PREP TO VALVE - 14XX A1
4	9785062	HINGE BRACKET, TRANS RIGHT - 14XX	19	9785180	HOSE, AIR, MOTOR TO MUFFLER - 14XX A1
5	9785092	SCREW HEX 3/8-16 X 1.75 FULL THD	20	9785067	BARB, HOSE, 0.25 FNPT X 0.25 BARB
6	9780402	WASHER 3/8 SPLIT LOCK	21	9688200	WASHER 1/2
7	9785123	MOUNT, VALVE - 14XX-A1	22	N/A	MUFFLER, INCLUDED WITH MOTOR, NOT AVAILABLE INDIVIDUALLY
8	9780193	NUT, NYLOCK 3/8-16	23	9785177	BRACKET, MUFFLER 14XX A1
9	9780725	PLATE, MOTOR MOUNT - 14XX A1	24	9619000	PULLEY, ST, 60 HZ MOTOR 54XX
10	9786128	MOTOR, AIR, CCW	25	9159800	SCREW, SET, 1/4-20 X 0.50, CUP PT
11	9780353	SCREW HEX 1/4 X 1.50	26	9622800	VALVE STEM
12	9780343	NUT 1/4-20 NYLON LOCK	27	9622600	CAP, SCHRADER VALVE, NYLON 54XX
13	9785172	PLATE, VALVE - 14XX A1	28	9592800	BELT, ROUND
14	9785190	SCREW, FLAT HD, PH #10-32 X 0.50 BLK OXIDE	29	9785173	VALVE, BALL, PANEL
15	9759820	SCREW, PH PAN HD 6-32 X 0.375	30	6785275	TRANSMISSION ASSY, 1410

#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued



BOM ID	PART#	DESCRIPTION	BOM ID	PART#	DESCRIPTION
1	9785175	BRACKET, AIR PREP 14XX A1	7	9780565	NIPPLE, 0.25 X CLOSE, BRASS
2	9785978	MOUNT, FILTER REGULATOR 14XX A1	8	9785174	LIMIT SWITCH, AIR, LEVER 14XX A1
3	9780343	NUT 1/4-20 NYLON LOCK	9	9781620	SCREW, HEX HD 1/4-20 X 1.75 GR5 ZINC
4	6786032	FILTER REGULATOR, AIR 14XX A1	10	9780732	ELBOW, HOSE, 0.25 MNPT X 0.25 BARB
5	9785980	CLAMP SPACER KIT 14XX A1	11	9780586	CONNECTOR, AIR, 0.25 MPT X 0.25 AIR
6	6786033	LUBRICATOR, AIR 14XX A1			

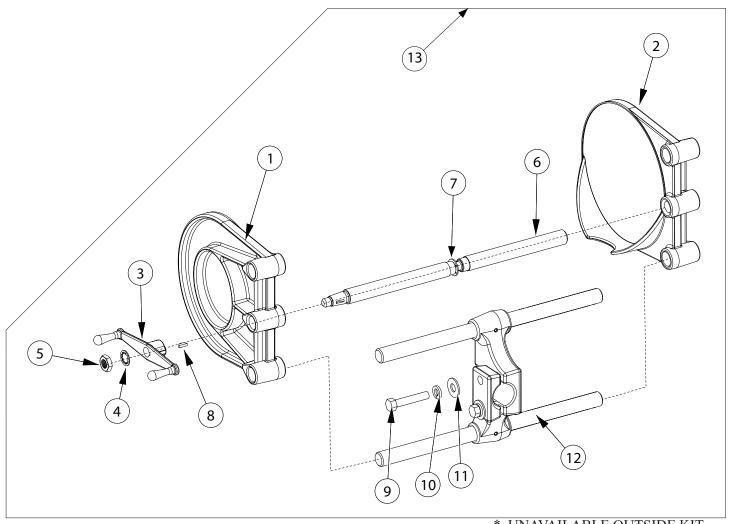
#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued

#### 8.5 Clamp Assembly, Left



\* UNAVAILABLE OUTSIDE KIT

BOM ID	PART#	DESCRIPTION
1	9784822	CLAMP JAW, LEFT FRONT - 54XX
2	9784821	CLAMP JAW, LEFT REAR - 54XX
3	9188100	HANDLE, CLAMP 5400
4	9143900	WASHER, INTERNAL TOOTH LOCK - 7/16
5	9138100	NUT, HEX JAM - 7/16-20
6*	9784830	CLAMP SCREW - 14XX
7	9782216	THRUST WASHER

BOM ID	PART#	DESCRIPTION
8	9140200	KEY, WOODRUFF NO 404
9	9690800	SCREW, HEX 3/8-16 X 2.00
10	9780402	SPLIT LOCK WASHER 3/8
11	9161100	WASHER, FLAT 3/8 USS
12*	6784823	ASSY, GUIDE ROD, HD - 14XX
13	6785100	14XX CLAMP ASSEMBLY - LEFT SIDE

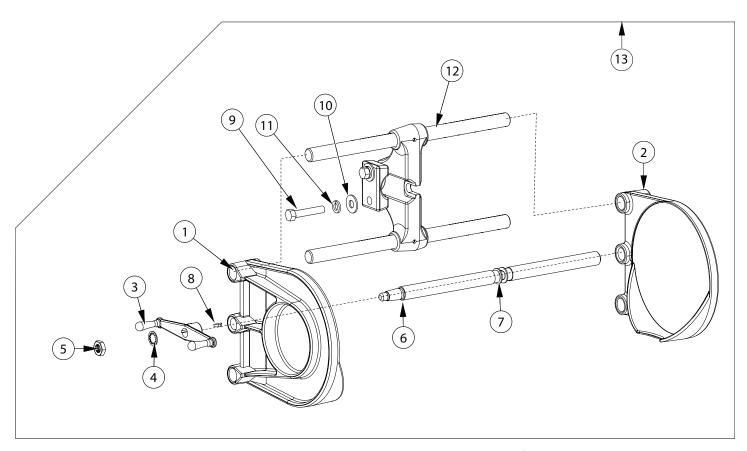
#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued

#### 8.6 Clamp Assembly Right



\* UNAVAILABLE OUTSIDE KIT

BOM ID	PART#	DESCRIPTION
1	9784822	CLAMP JAW, RIGHT FRONT - 54XX
2	9784821	CLAMP JAW, RIGHT REAR - 54XX
3	9188100	HANDLE, CLAMP 5400
4	9143900	WASHER, INTERNAL TOOTH LOCK - 7/16
5	9138100	NUT, HEX JAM - 7/16-20
6*	9784830	CLAMP SCREW - 14XX
7	9782216	THRUST WASHER

BOM ID	PART#	DESCRIPTION
8	9140200	KEY, WOODRUFF NO 404
9	9690800	SCREW, HEX 3/8-16 X 2.00
10	9780402	SPLIT LOCK WASHER 3/8
11	9161100	WASHER, FLAT 3/8 USS
12*	6784823	ASSY, GUIDE ROD, HD - 14XX
13	6785101	14XX CLAMP ASSEMBLY - RIGHT SIDE

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# ...Exploded Views, Continued 8.7 Enclosure Assembly (1400-X1) 5

BOM ID	PART#	DESCRIPTION
1	9785042	ENCLOSURE, EXPLOSION PROOF 1400
2	9785592	SCREW, TYPE F 5/16-18 X 1.25
3	9781672	BUSHING 1400
4	9785073	STRIKE PLATE, CLAMP COVER 14XX

BOM ID	PART#	DESCRIPTION
5	9781840	NUT, KEPS #8-32
6	9781812	WELL NUT #10-32
7*	9785041	ENCLOSURE, AIR

\* 14XX-A1 Models

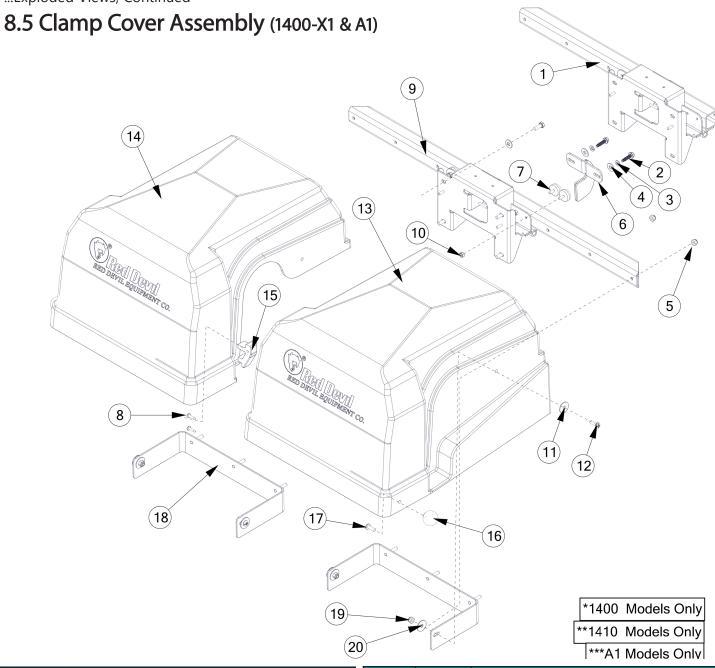
PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY Exploded Views, Continued..

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...Exploded Views, Continued



BOM ID	PART#	DESCRIPTION	
1**	9785074	HINGE TUBE WELDMENT 1410	
2***	9621900	SCREW, HEX WASHER HD, 1/4-20X1.00 TC TYPE F	
3***	9780164	WASHER LOCK 1/4	
4***	9781823	WASHER, FLAT 1/4 USS	
5 9780343		NUT 1/4-20 NYLON LOCK	
6*** 9785176		ACTUATOR LIMIT SWITCH 14XX A1	
7	9784048	BUMPER, THREADED RUBBER	
8	9785059	SCREW, TRUSS HD SHEET METAL #8 X 0.75	
9*	9785063	HINGE TUBE WELDMENT 1400	
10	9782004	NUT #10-24 NYLON LOCK	

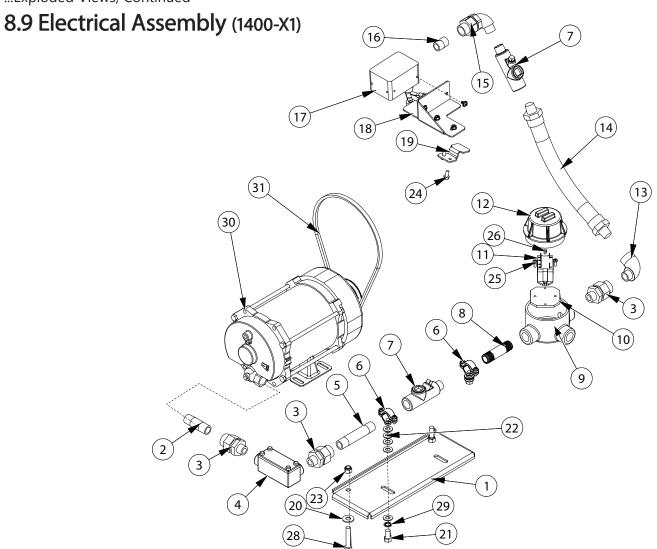
BOM ID	PART#	DESCRIPTION
11	9781414	WASHER FNEDER 1/4
12	9780827	SCREW, TRUSS HEAD , 1/4-20 X 0.75
13	9785003	CLAMP COVER, RIGHT
14	9785002	CLAMP COVER, LEFT
15	9785067	TENSION BLOCK, CLAMP COVER 14XX
16	9785066	HANDLE, RED BALL 14XX
17	9780827	SCREW, TRUSS HEAD, 1/4-20 X 0.75
18	9785068	STUD PLATE, CLAMP COVER 14XX
19	9780343	NUT 1/4-20 NYLON LOCK
20	9781414	WASHER FENDER 1/4

#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued



BOM ID	PART#	DESCRIPTION
1	9785160	MOUNT, CONDUIT CLAMP 1400 X1
2	9784069	NIPPLE, 1/2 NPT X 2.50
3	9782429	UNION, 1/2 NPT
4	9785153	CONDUIT BODY, L 1/2 NPT
5	9784985	NIPPLE, 1/2 NPT X 4.00
6	9785168	CLAMP, PIPE 1/2 NPT
7	9784989	FITTING, SEALING, 1/2 NPT
8	9785154	NIPPLE, 1/2 NPT X 3.00
9	9785155	CONDUIT BOX, T, 1/2NPT
10	9784618	BRACKET RELAY MOUNT
11	5784622	RELAY, CUBE 2 POLE 120V
12	9784617	COVER, DEEP, CONDUIT BOX
13	9784702	ELBOW, 90 DEGREE, 1/2 NPT, M-F
14	9785156	CONDUIT, FLEXIBLE 1/2 NPT, 10 LONG, M-M
15	9784659	ELBOW, 90 DEGREE UNION, 1/2 NPT, M-F

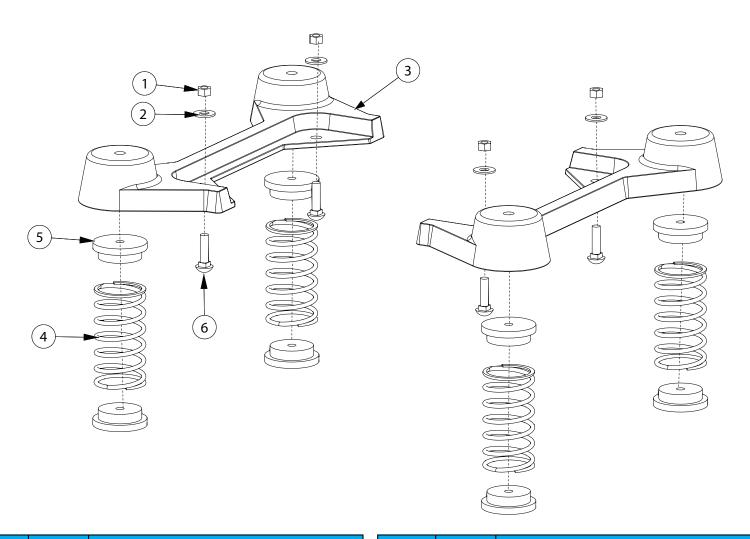
BOM ID	PART#	DESCRIPTION
16	9682000	NIPPLE, PIPE 1/2 NPT X 2 LONG, GALV.
17	5784065	SWITCH, LIMIT, EXPLOSION PROOF 20A RATING
18	9785157	MOUNT, LIMIT SWITCH 1400 X1
19	9785158	ACTUATOR, LIMIT SWITCH 1400 X1
20	9161100	WASHER, FLAT 3/8 USS
21	9780144	SCREW HEX 3/8-16 X 0.75
22	9100731	WASHER, FLAT 3/8 X 0.82 OD
23	9780193	NUT, NYLOCK 3/8-16
24	9780366	SCREW HEX THD CUT 1/4-20 X 0.50
25	9781142	SCREW, PAN HEAD, 10-32 X 0.50
26	9781824	SCREW HEX #8 X 1/4
28	9780617	SCREW HEX 3/8-16 X 2.00
29	9163000	WASHER, LOCK, INT TOOTH, 0.375
30	5784615	MOTOR, 1/3 HP EXPLOSION PROOF
31	9160500	V BELT

#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued

#### 8.10 Counter Base (5153-00)



BOM ID	PART#	DESCRIPTION
1	9389500	NUT, HEX 3/8-16
2	9161100	WASHER, FLAT 3/8 USS
3	9616500	COUNTER BASE

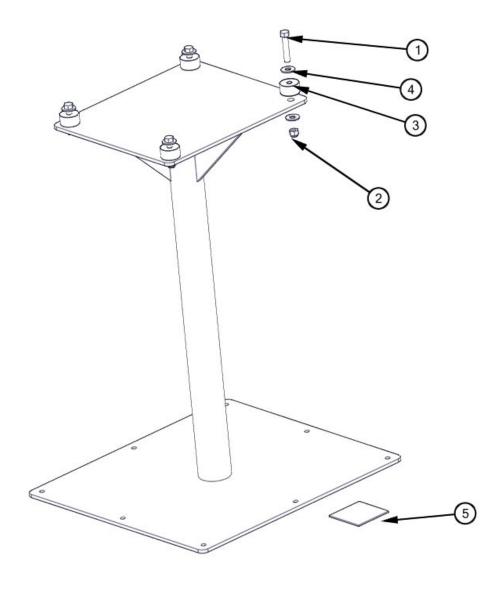
BOM ID	PART#	DESCRIPTION
4	9190400	SPRING
5	9190300	FOOT, RUBBER
6	9190800	CARRIAGE BOLT 3/8-16 X 1.50

#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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...Exploded Views, Continued

#### 8.11 Pedestal Base (5152-00)



BOM ID	PART#	DESCRIPTION
1	9780617	SCREW HEX 3/8-16 X 2.00
2	9780193	NUT, NYLOCK 3.8-16
3	9327500	RUBBER FEET

BOM ID	PART#	DESCRIPTION
4	9161100	WASHER, FLAT 3/8 USS
5	6787670	FEET, 3M VHB KIT (4 PADS)

#### PART NUMBERS LISTED MAY ONLY BE AVAILABLE IN KIT FORM OR AS AN ASSEMBLY

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#### 9. Ordering

#### **Replacement Parts**

#### **HOW TO ORDER REPLACEMENT PARTS**

Replacement parts can be ordered from Radia by telephone, fax, or email:

## RADIA 800-221-1083 763-533-2969 763-533-0015 (FAX) orders@radiaproducts.com

If you need help in determining the proper part(s) to order, please call Customer Care at 1-800-221-1083. Always indicate the Model and Serial numbers of the machine when ordering replacement parts.

#### **GENERAL PARTS REPLACEMENT POLICIES**

While your machine is under warranty, do not attempt on-site repair or parts replacement without first contacting RADIA. (to protect your warranty). After the warranty expires, replacement parts and recommendations for on-site servicing are available from RADIA. Please contact Customer Care for assistance.

#### **RESTOCKING FEE**

A restocking fee will be charged on all unused parts which are returned.

For instructional "How To" videos please visit: www.radiaproducts.com Air & Explosion

#### 10. Warranty

#### **Equipment Covered Under This Warranty**

Models 1400-A1, 1410-A1, 1400-X1

Radia warrants equipment manufactured by it and bearing its name to be free from defects in material and workmanship.

EXCEPT FOR THE WARRANTY SET FORTH HEREIN, RADIA MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO THE EQUIPMENT, INCLUDING ANY (a) WARRANTY OF MERCHANTABILITY; (b) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; OR (c) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE.

This warranty applies only when the equipment is installed, operated and maintained in accordance with written Radia instructions as appearing in the owners' manuals.

This warranty does not cover, and Radia shall not be liable for, any malfunction, damage, or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering or substitution of non-Radia component parts, modification or use for non-intended purposes. Nor shall Radia be liable for malfunction, damage or wear caused by the incompatibility of Radia equipment with structures, accessories, equipment, or materials not supplied by Radia.

Subject to the limitations set forth above, Radia shall (i) repair or replace the equipment (or the defective part) or (ii) credit or refund the price of such equipment. Costs of labor and transportation for service of machines under this warranty will also be covered during the warranty period if Radia elects to repair or replace the equipment. Normal ground freight will be covered for replacement parts sent within the warranty period. For customers outside of the US and Canada, the warranty is for parts only. Ground or common carrier ground freight will be covered for the return of defective items only. In no case shall Radia's liability exceed the amount of the purchase price.

\*All warranty repairs must be executed by a Radia Authorized Service Center or warranty will be voided.

THE REMEDIES SET FORTH HEREIN ARE PURCHASER'S SOLE AND EXCLUSIVE REMEDY and RADIA'S ENTIRE LIABILITY FOR ANY BREACH OF THE LIMITED WARRANTY SET FORTH HEREIN.

Please contact your Radia Relationship Manager at 800-221-1083 for specific questions regarding specific questions regarding warranty terms.

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11. Notes		



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#### For sales or service, please contact

RADIA
Attn: Customer Service Department
14900 21st Ave N
Plymouth, MN 55447
USA

**U.S. Telephone:** 800.221.1083

**International Telephone:** 763.533.2969

**Fax:** 763.533.0015

**E-mail:** info@radiaproducts.com

www.radiaproducts.com

For instructional "**How To**" **videos** please visit: www.radiaproducts.com

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