

# <u>AIR OPERATED</u> BALL VIBRATOR



# MOUNTING AND OPERATING INSTRUCTIONS

Thank you for purchasing the Cougar Air Operated Ball Vibrator. These instructions have been written to insure the proper installation and operation of your Cougar Vibrator. Please read and understand the instructions before attempting installation. If you have any questions concerning your new Cougar Vibrator, contact the factory at 1-800-262-2106 or your Cougar dealer/distributor.

#### RECEIVING AND STORAGE

Your Cougar Vibrator has been thoroughly inspected and tested before shipping. However, damage may occur during shipment. Therefore, the vibrator should be inspected when received. If any damage has been found, this should be reported to the carrier. If the vibrator is to be stored before installation, keep in dry constant temperature and away from dust, dirt and water.

### MOUNTING

Mounting of your Cougar Vibrator will be the first and most important step you will take during the vibrator installation. For material to flow efficiently it is important that the vibration be distributed throughout your application. The more rigid and firm the mount, the more effective and efficient your vibrator will be. A weak mount will hamper the distribution of vibration, lower your vibrators efficiency and possibly result in vibrator failure, and/or fatigue of your application.

### WARRANTY

All Cougar Industries, Inc. products are covered by a one year limited warranty. Ask for details.



## WARNING

Read instructions before attempting vibrator installation.

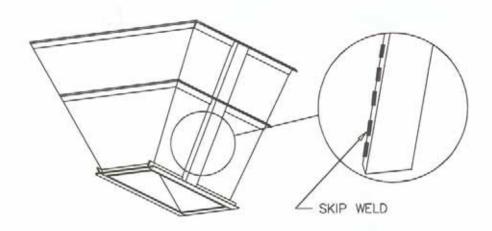
Care should be taken when working with compressed air, for this could result in eye/or ear injury.

Wear eye and ear protection when working with compressed air.

Use clean/dry/lubricated air only.

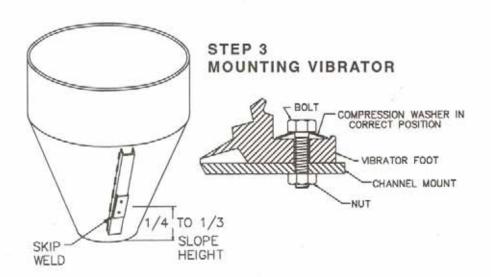
### STEP 1 LOCATION OF REINFORCING CHANNEL

The reinforcing channel should be mounted on the center line of the side with the least slope. If your application has one vertical side, the vibrator must be mounted on the slope side opposite the vertical side.



## STEP 2 LOCATION OF THE VIBRATOR MOUNT CHANNEL

It is recommended that the vibrator be 1/4 to 1/3 the distance up from the outlet to the top of the sloped side.



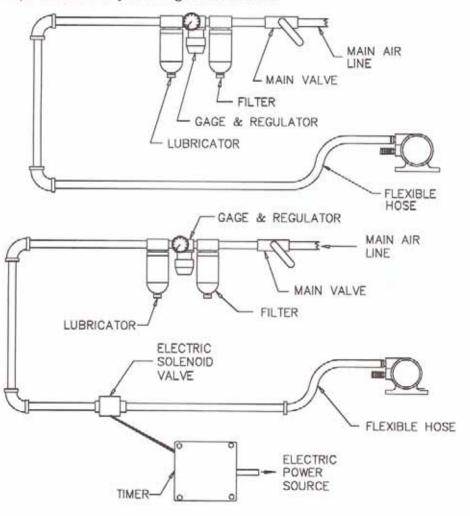
# A

### WARNING

Make sure the air supply that the vibrator will be connected to has been shut off before attempting the plumbing installation.

Caution should be taken to protect from eye and/or ear injuries.

The sketches below represent two possible ways for plumbing, controlling, filtering and lubricating your Cougar Ball Vibrator. These accessories are available from Cougar, refer to the Accessories section for further information. The use of filtered, regulated, lubricated air will lengthen the life and improve the performance of your Cougar Ball Vibrator.



### NOTE:

If rigid pipe is used to bring air to the approximate location of the vibrator, it is recommended that from the pipe to the vibrator, a section of flexible hose is used to keep from transmitting the vibration to the pipe.

# STEP 5 OPERATION AND MAINTENANCE

- Before running the vibrator for the first time, look over installation for proper welding and plumbing.
- After approximately one hour of operation, check vibrator bolts for tightness, this check should be done once a month along with the air supply, mounting and muffler.
- Replacement parts for the vibrator are available from your Cougar dealer or the factory, see reverse side for part identification.
- 4. Order by model, part number and description.

### NOTE:

Do not operate vibrator on empty structure, as damage to structure and/or vibrator could occur.

Operate vibrator only when material has a place to flow. If flow is constricted because of closed gate or other means of restriction, compacting will occur.

# PERFORMANCES

	Starting Pressure (PSI)			At 20 PSI		At 60 PSI			At 100 PSI		
MODEL	HORZ.	VERT.	RPM	FORCE	CFM	RPM	FORCE	CFM	RPM	FORCE	CFM
ABF-10	12	20	9500	8	2.8	15500	20	6	19200	31	9.2
ABF-13	3	18	8600	17	3.7	15100	52	8.1	17500	70	12.5
ABF-19	5	20	7750	63	4.9	13250	184	11.1	16000	269	16.5
ABF-25	5	41	6400	135	5.8	9700	313	12.8	12000	474	19.5
ABF-35	5	41	7000	292	7.1	10750	689	14.7	12750	970	22
ABF-41	5	65	3000	192	10.4	5000	533	20.8	5800	717	34
ABF+51	5	84	2100	142	10.4	3600	416	22.5	5600	1006	35
	Minimum Starting Pressure (PSI)			At 20 PSI		At 60 PSI		At 100 PSI			
MODEL	HORZ.	VERT.	RPM	FORCE	CFM	RPM	FORCE	CFM	BPM	FORCE	CFM
ABL-10	4	5	15750	21	3.3	23000	45	6.4	26000	57	10.5
ABL-13	5	10	13000	38	4.2	19500	86	8.8	20000	91	13.5
ABL-19	5	13	8750	80	5.2	15000	236	11.2	17000	303	17.5
ABL-25	5	19	7400	180	6.6	11000	399	14.1	12750	515	23.5
	Minimum Starting Pressure (PSI)		At 20 PSI		At 60 PSI		At 100 PSI				
MODEL	HORZ.	VERT.	RPM	FORCE	CFM	RPM	FORCE	CFM	RPM	FORCE	CFM
ABU-6	1	1	17000	8	2	25000	18	4.5	27000	20	8.5
ABU-13	5	10	13000	38	4.2	20000	90	7.5	22000	109	11.9
ABU-19	5	13	10500	116	4	16000	270	11	18000	340	16.5
ABU-25	5	19	7400	180	6.6	11000	398	13	13000	556	19
ABU-32	5	30	5100	178	6	7500	383	17	12500	1065	23.5
ABU-38	5	50	4200	240	7	6200	524	20	10500	1502	26.4
ABU-44	5	60	3200	266	9	6000	935	21	7000	1273	29.5

# REPLACEMENT PARTS LIST

ABU AE	BF ABL	(1)		(2)	(2)	(2)	(2)	
	Q 60	0	0	0	0	0	G	000000
	HOUSING	REPAIR KIT	BALL	RACE	'O' RING	END CAP	SNAP RING	MUFFLER
ABU-6	110308	211007	100178	100146	603000	130184	530400	210314
ABF-10	110225	211000	100156	100146	603000	130184	530400	210314
ABL-10	110226	211000	100156	100146	603000	130184	530400	210314
ABF-13	110227	211001	100157	100147	603001	130185	530401	210314
ABL-13	110228	211001	100157	100147	603001	130185	530401	210314
ABU-13	110300	211001	100157	100147	603001	130185	530401	210314
ABF-19	110229	211002	100158	100148	603002	130186	530402	210315
ABL-19	110230	211002	100158	100148	603002	130186	530402	210315
ABU-19	110294	211002	100158	100148	603002	130186	530402	210315
ABF-25	110231	211003	100159	100149	603003	130187	530403	210315
ABL-25	110232	211003	100159	100149	603003	130187	530403	210315
ABU-25	110297	211003	100159	100149	603003	130188	530403	210315
ABU-32	110296	211008	100179	100177	603003	130188	530403	210316
ABF-35	110233	211004	100160	100149	603003	130188	530403	210315
ABU-38	110302	211009	100180	100182	603012	130212	530404	210316
ABF-41	110235	211005	100161	100165	603004	130180	530408	210316
ABU-44	110304	211010	100181	100165	603004	130182	530408	210317
ABF-51	110235	211006	100162	100165	603004	130182	530408	210316

<sup>(1)</sup> Includes: 1-Ball. 2-Races. 2-'O' Rings.

<sup>(2)</sup> Vibrator requires quantities of 2 each.

## ACCESSORIES

				(1)		(2)	(3)	
	Ser les		To the same of the			EXEMINATE STATES		
	MOUNT	BOLT KIT	BALL VALVE	~	SOLENOID	FITTING KIT	HOSE	
ABU-6	220710	221540	606003	601022	193753	607000	605003	
ABF-10	220670	221525	606003	601022	193753	607000	605003	
ABL-10		221524	606003	601022	193753	607000	605003	
ABF-13	220670	221527	606003	601022	193753	607000	605003	
ABL-13		221626	606003	601022	193753	607000	605003	
ABU-13	220670	221527	606003	601022	193753	607000	605003	
ABF-19	220670	221527	606004	601022	193753	607001	605004	
ABL-19		221526	606004	601022	193753	607001	605004	
ABU-19	220670	221527	606004	601022	193753	607001	605004	
ABF-25	220671	221529	606004	601022	193753	607001	605004	
ABL-25		221528	606004	601022	193753	607001	605004	
ABU-25	220671	221529	606004	601022	193753	607001	605004	
ABU-32	220671	221529	606004	601022	193753	607001	605004	
ABF-35	220671	221529	606004	601022	193753	607001	605004	
ABU-38	220708	221541	606004	601022	193753	607002	605004	
ABF-41	220700	221530	606004	601022	193753	607002	605004	
ABU-44	220709	221541	606009	601044	193753	607003	605005	
ABF-51	220700	221530	606004	601022	193753	607002	605004	



197250 (3 to 60 sec. on/off) 197251 (8 to 180 sec. on/off) 197252 (.5 to 10 min. on/off) 197253 (3 to 60 min. on/off) 197254 (8 to 180 min. on/off) 197255 (.5 to 10 hr. on/off) 197256 (2.5 to 100% of selected time range-on/off. 15/60 sec., 8/60 min.)

- (1) Filter/regulator/lubricator also sold separately.
- (2) Fitting kit and hose assembled to order.
- (3) Hose ordered by the foot.
- (4) Timer kits can be used on all ball vibrator models.

