

# PIG® Oil Filter Crusher Manual

Model Number: DRM584 - Oil Filter/Paint Can Crusher



*DRM584 - Oil Filter/Paint Can Crusher*

New Pig

One Pork Avenue • Tipton, PA 16684-0304



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### **PIG® Oil Filter/Paint Can Crusher**

Disposing of used oil filters and paint cans can be time consuming and costly for some industries. Until recently, they were disposed of by landfilling in their uncrushed form; however, some states have banned this practice.

In 1996, New Pig developed the PIG® Oil Filter/ Paint Can Crusher to help minimize these wastes. This air-operated unit is designed to crush oil filters up to 16" in height (reducing them to 1/3 or even 1/4 of their original size) and the chamber can also accommodate two 1-gallon paint cans simultaneously.

The unit comes equipped with a drain tray, which can be used to drain punctured filters and cans prior to crushing. Drain ports under the tray have been installed to allow for draining into 55-gallon drums or other collection containers.

There are several advantages to using the PIG® Oil Filter/Paint Can Crusher:

- \*\* The crushing chamber is adjustable to reduce cycle time.
- \*\* For safety, the Crusher features an interlock lever that prevents the unit from operating when the chamber door is unlocked.
- \*\* Crushing filters and cans means more of them will fit into a single drum for disposal. This helps reduce overall disposal costs.
- \*\* Liquids that are drained and collected may be recycled.
- \*\* Using the Crusher is one means of meeting the EPA's requirement, for hot-draining used oil filters.

# Section I - PIG<sup>®</sup> Oil Filter/Paint Can Crusher

## 1 Setup Instructions

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- 1) Remove PIG<sup>®</sup> Oil Filter Crusher from pallet and place on floor.
- 2) If desired, permanently mount the crusher to the floor using the pre-drilled holes in the base. Up to 1/2" floor anchors can be used. Floor anchoring not required for operation (anchors not included).
- 3) Loosen the vent screw located on top of the hydraulic air pump with a phillips screwdriver and pull up vent/fill tube to first notch for proper venting.
- 4) Remove the pipe plug from the air intake pipe located on the back of the unit.
- 5) Thread the 3/8" x 1/4" Hex Bushing and 1/4" pipe nipple into the air intake and then thread the provided air filter and lubricator onto the pipe nipple.
- 6) Thread a 1/4" male air chuck into the filter.

## 2 Operating Instructions

**Always wear the proper safety equipment when operating this unit.**

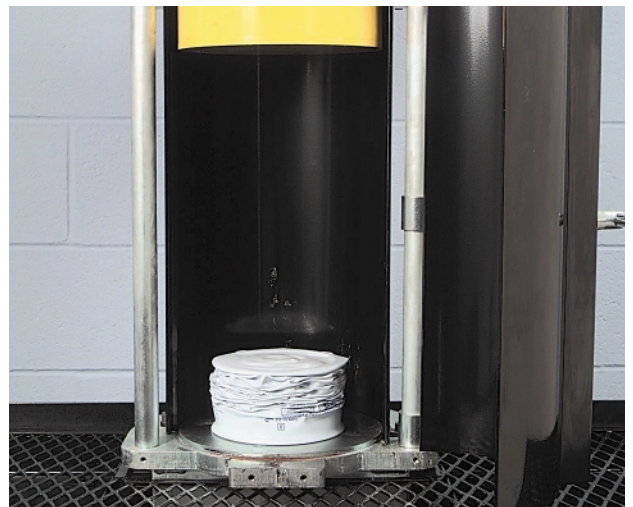
1) Open door and center filter on base.



2) Close door and activate\* by pushing in the start/stop knob.



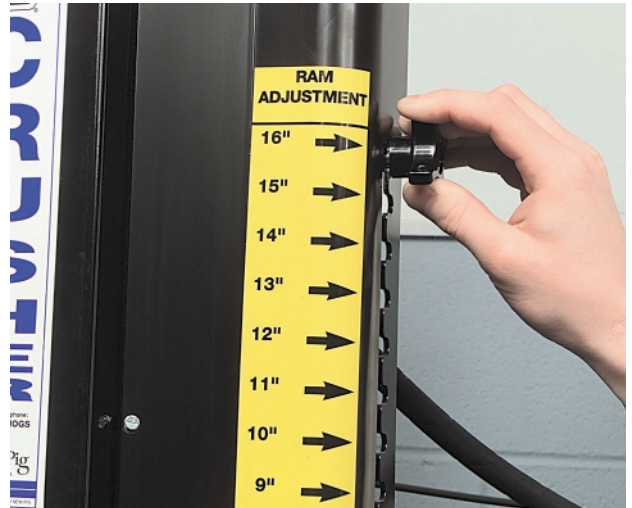
3) Unit will cycle itself and return to the up position (to stop unit during cycle, pull start/stop knob.)



\*Note: Unit will not operate if door handle is not in the locked position.

## Adjusting the ram opening to shorten cycle time for smaller filters

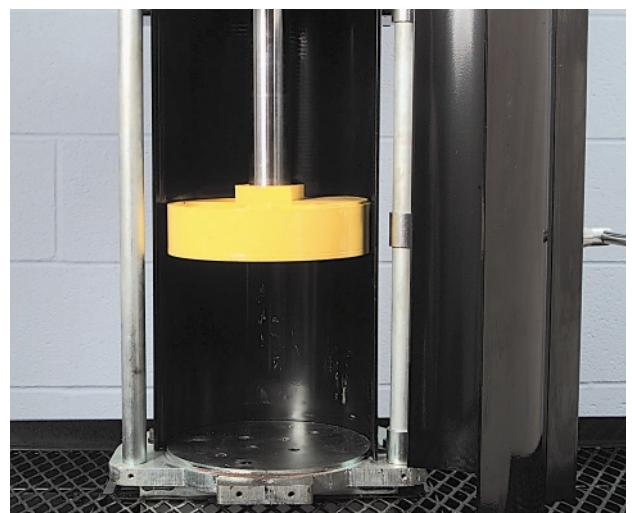
1) Loosen knob on the stop rod and position the knob over to the travel slot.



2) With the crusher chamber empty, start machine and guide the knob along the travel guide until it reaches the desired opening height.



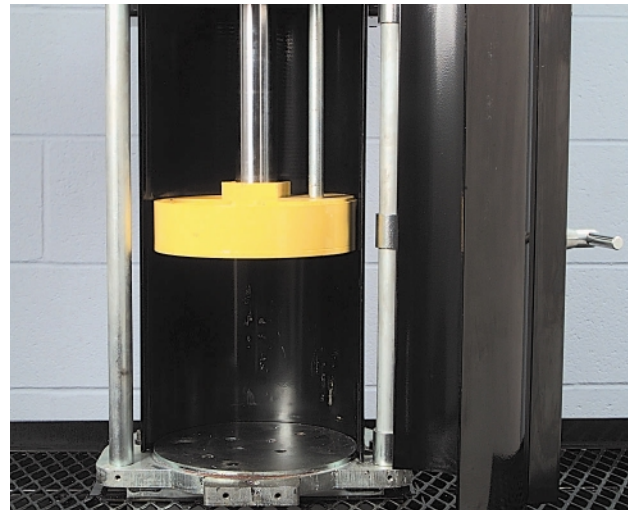
3) Open door and ram will stop.



4) Position the knob back into slot and tighten.



5) Pull start/stop knob and the ram will reset to new opening height.



***Note: Minimum 80 PSI of air required for operation.***

## Item# DRM584 · PIG® Oil Filter/Paint Can Crusher

**DESCRIPTION-** An air operated heavy duty hydraulic press used to crush oil filters or paint cans as a waste reduction process.

Packaging:	Each
Color:	Black
Weight:	479 lbs.
# Per Pallet:	1
Dimensions:	
Overall -	34" Deep x 40" W x 84" H
Crushing Chamber -	16 1/2" H x 7 3/4" Diameter
Composition:	Hot Rolled Steel
16" Cycle Time:	1 minute 40 seconds at 120 psi air pressure
4" Cycle Time:	25 seconds
Maximum Filter Ht.:	16"
Maximum Width:	7 1/2"
Downforce Pressure:	19,000 lbs.
Minimum Air Require.:	80 ps

## FEATURES/BENEFITS

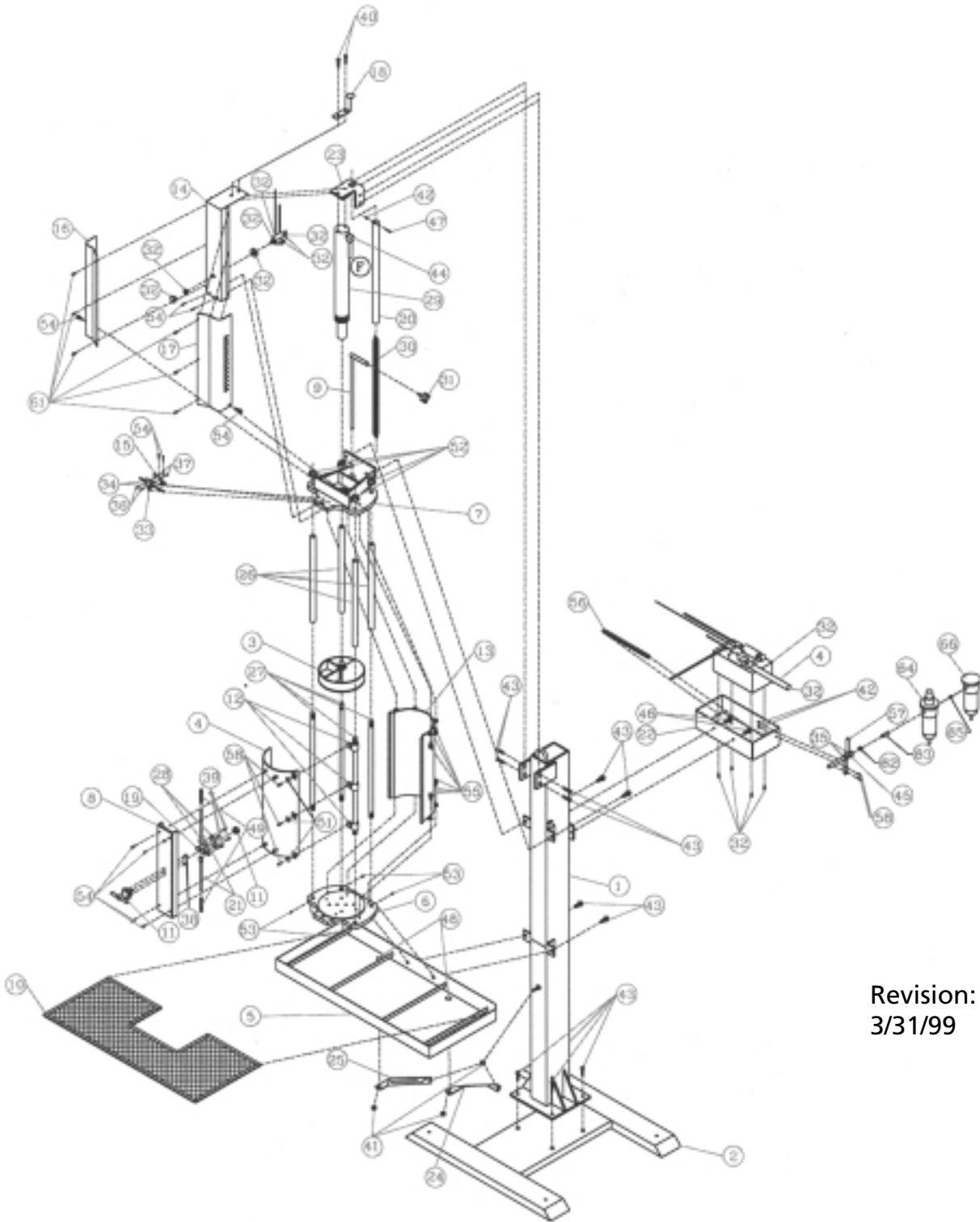
- 19,000 lbs. downforce pressure / Will easily crush oil filters up to 16" H with steel centers.
- Hydraulic pump / Stays at maximum downforce pressure at any air pressure over 80 psi.
- 16" H crushing chamber. / Will crush any oil filter 16" or smaller plus up to two 1-gallon paint cans.
- Adjustable in 1" increments. / Allows cycle time to be reduced when the full 16" isn't needed. Crushes in as little as 25 seconds.
- Automatic cycle / Once started unit completes cycle unattended.
- Draining tray on each side of crushing chamber. / Allows user to drain filters before and after crushing.
- Drain plugs in tray / Liquids drain directly into a 55 gallon drum.
- Custom option available / Unit can be customized to crush any oil filter up to 18"H.

## APPLICATIONS

- Crushing oil filters up to 16" H and 1-gallon paint cans.



Oil Filter /Paint Can Crusher - DRM584



Revision: 3  
3/31/99

## 5 Parts List

### OIL FILTER CRUSHER (ITEM # DRM584)

Assy#	Pcs.	Part#	Description
1	1	600078A	Main Frame Assembly
2	1	600078B	Base Plate Assembly
3	1	600078C	Dome Assembly
4	1	600078D	Door Assembly
5	1	600078E	Drain Tank Assembly
6	1	600078F	Bottom Plate Assembly
7	1	600078G	Top Plate Assembly
8	1	600078H	Latch Plate Cover Assembly
9	1	600078I	Slide Handle Assembly
10	1	600078J	Drain Screen Assembly
11	1	600078K	Tee Handle Assembly, with mounting nut
12	3	600078L	Tube Hinge Assembly
13	1	600078M	Cylinder Chamber Assembly
14	1	600078-27	Front Cover
15	1	600078-29	Micro-Switch Mounting Bracket
16	1	600078-30	Left Hand Cylinder Cover
17	1	600078-31	Right Hand Cylinder Cover
18	1	600078-32	Spring Dust Cover
19	1	600078-33	Latch Tumbler
20	1	600078-34	Spring Guide Tube
21	2	600078-35	Handle Linkage
22	1	600078-44	Pump Mounting Pan
23	1	600078-45	Cylinder Mounting Bracket
24	1	600078-46	Right Hand Tank Bracket
25	1	600078-47	Left Hand Tank Bracket
26	4	600078-57	Spacer Tube
27	4	600078-58	3/4" Threaded Rod
28	2	600078-64	Door Linkage
29	1	P1068	Hydraulic Cylinder
30	1	P1060	Ram Spring
31	1	P1061	Plastic Knob
32	1	P1069	Pump, Hose, Hardware and Switch
33	1	214C	ARO Air Valve
34	2	1169x4S	Male Swivel Elbow
35	1	1168x4x6	Male Connector
36	2	F1032	Slotted Machine Screw
37	2	F1031	Hex Nut with Washer

## 5 Parts List

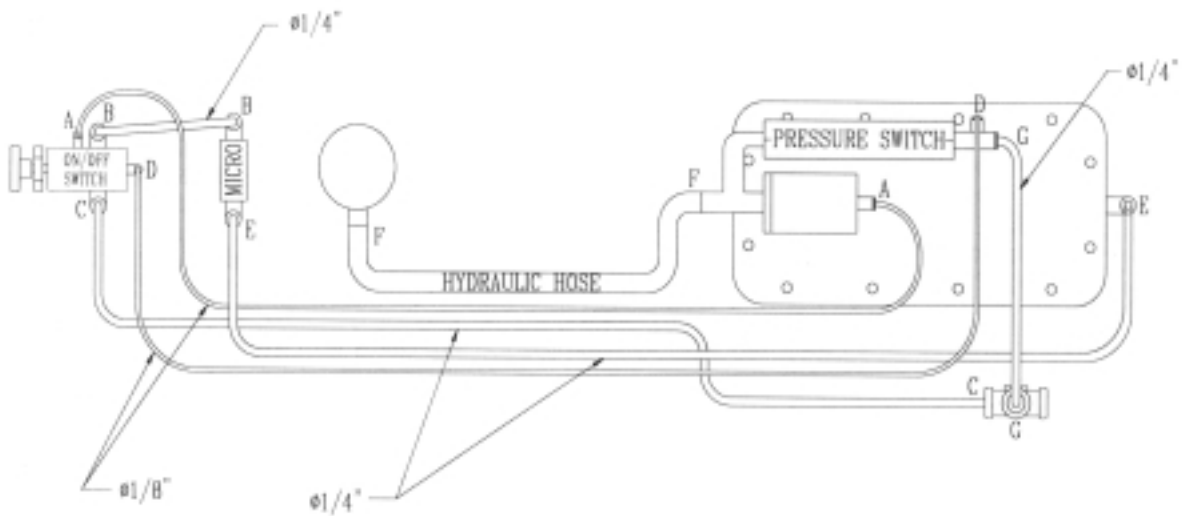
### ***ELECTRIC COMPACTOR(S) PARTS LIST***

Assy#	Pcs.	Part#	Description
38	2	F1048	10-32 x 3/8" Button Head Screw
39	4	F1204	Shoulder Screw
40	2	F1425	3/8"-16 x 1" Flange Bolt
41	3	F1421	3/8"-16 Hex Flange Nut
42	3	F1152	1/4"-20 Lock Nut
43	12	F1562	1/2"-13 x 1 1/4" Hex Head Flange Bolt
44	1	P1063	9681 Street Elbow
45	1	150140A	Air Fitting Assembly
46	2	F1471	3/8"-16 x 3/4" Whiz Bolt
47	1	F1215	1/4"-20 UNC x 1 1/2" Hex Head Cap Screw
48	2	F1550	1/2" I.P. Plug
49	2	P1119	3.0" Long Spring
50	As Reqd.	P1120	Steel Shim
51	3	F1925	1/4" I.D. 0.050" Thick Flat Washer
52	4	F1656	3/4" Nylon Hex Lock Nut
53	4	F1161	1/4"-20 UNC x 5/16" Socket Head Screw
54	10	F1185	1/4"-20 UNC x 1/2" Socket Head Cap Screw
55	8	F1488	3/8"-16 UNC x 5/8" Socket Head Cap Screw
56	12in.	P1070	Foam Strip
57	1	1169x4x6S	ALKO Male Swivel Elbow
58	5	F1159	1/4"-20UNC x 1/2" Hex Head Cap Screw
59	4ft.	P1065	1/8" Nylon Tubing
60	6ft.	N11-417B	1/4" Nylon Tubing
61	6	F1023	#6 x 1/2" Hex Head Self Tapping Screw
62	1	P1179	3/8" x 1/4" Hex Bushing
63	1	P1130	1/4" x 3" Brass Pipe Nipple
64	1	P1177	Lubricator
65	1	P1178	1/4" Hex Nipple
66	1	P1176	Filter

# Section II-General Information - DRM584

## 1 Air Schematic

AIR SCHEMATIC



CONNECTION	PART#
A-A	P1065
B-B	N11-417B
C-C	N11-417B
D-D	P1065
E-E	N11-417B
F-F	-
G-G	N11-417B

## 2 Preventative Maintenance

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1) Clean bowl filter and make sure oil bowl is filled.

**Caution:** Do not over oil - 1 to 2 drops a cycle.

2) Check hydraulic oil level. Should approximately be 1" from top of filler hole.

Use a general purpose medium weight hydraulic fluid. New Pig Item# DRM673

3) Keep crush chamber free of debris.

4) Check for loose nuts, bolts and pins.

5) Clean drain holes in the bottom of the crush chamber regularly.

6) Check to make sure ram plate has not loosen from the cylinder.

To remove or tighten ram plate run unit empty. Let pressure build. Just before building enough pressure to recycle, pull stop button. This locks the cylinder and allows the ram plate to be tightened or removed.

**Note:** When removing or tightening ram plate return spring will need to be disengaged on DRM584. This can be done with the ram in to full returned position by removing the spring retaining bolt in the tube at the top of the unit. Needle nose pliers will be required to pull spring back up the tube to allow the retaining bolt to be inserted. This must be done with the ram in the full up position.

## 3 Trouble Shooting Guide

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### **Hydraulic pump runs, but ram will not move.**

- Low air pressure - Air pressure should be between 80 psi and 120 psi.
- Hydraulic fluid is low - Use a medium weight hydraulic fluid and fill to within 1" of the top of filler hole with the ram in the up position.
- Water and dirt in the air supply - Drain water and clean filter bowl. Make sure oiler is full and working.
- Vent tube on the hydraulic pump is closed - Open tube.
- Ram will not return to up position - Check for wedged material between ram plate and crush chamber wall.

### **Hydraulic pump will not run.**

- Check air supply - Air pressure to unit should be between 80 psi and 120 psi.
- Water and dirt in the air supply - Drain water and clean filter bowl. Add a small amount of air tool oil or light weight machine oil to the air line.
- Door handle must be in the locked position.
- Door lock pins are not aligning with holes or door is dragging - DRM584 - Adjust the four allen bolts on the front of the latch cover and/or adjust the 3 hinge alignment bolt located to the right of the door.
- Safety micro on door is out of alignment or not fully engaged - Adjust micro so it is fully engaged when door is in the closed position. DRM584 - Located behind the front cover.
- Check on/off knob located in front of crusher. Knob should be pulled out fully to operate. Depressing knob will stop crusher. Overall Dimensions - 67 1/8" H x 31 1/2" W x 38" D

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