



16573313
Edition 3
December 2009

Air Grinder

99V Series

Parts Information

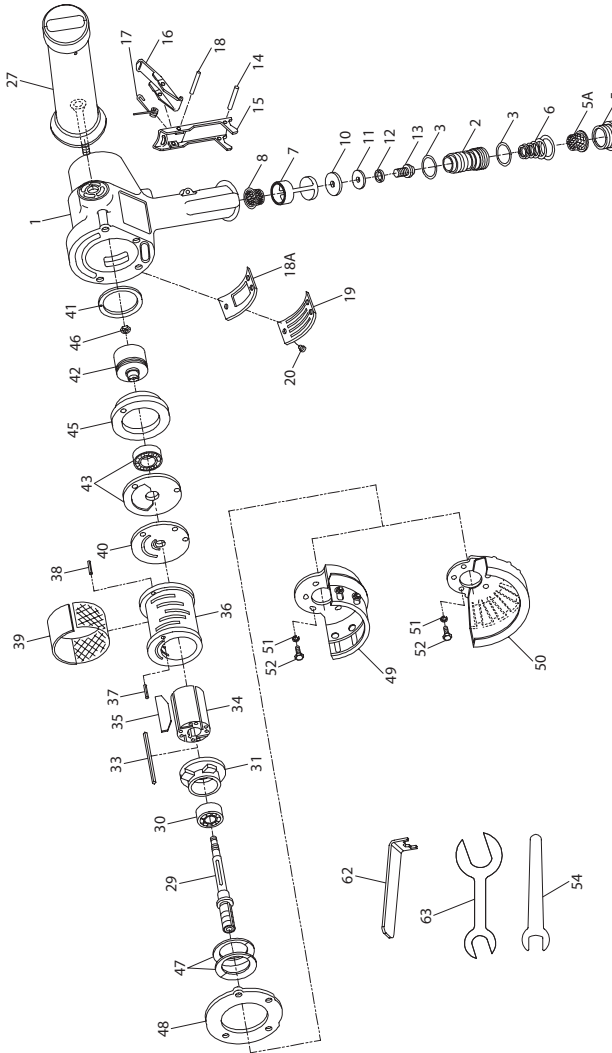


Save These Instructions

 **Ingersoll Rand**

88V Series Air Grinder Exploded Diagram

Use this drawing with part listing for models without built-in oilers



(Dwg. TPA1708)

88V Series Air Grinder Parts List

Use this part listing with drawing TPA1708 for models without built-in oilers

Item	Part Description	Part Number	Item	Part Description	Part Number
# 1	Cylinder Case Assembly		19	Exhaust Deflector	99V60-23
	for models ending in -EU	99V60-EU-A25A	20	Exhaust Deflector Screw (3)	99V60-200
	for all other models	99V60-A25A	*	Nameplate Kit (for European compliant models)	99V-EU-K301A
2	Throttle Valve Assembly	88V60-A302	*	Nameplate Screw (for European compliant models) (4)	BN403-302
3	Throttle Seal (2)	C321-606		*	Warning Label (for European compliant models)
5	Inlet Bushing	88V60-38	*		Nameplate Kit (for domestic models)
• 5A	Inlet Bushing Screen	834-61		Nameplate Screw (4)	BN403-302
• 6	Throttle Valve Spring	99V60-262		Warning Label	WARNING-4-99
• 7	Throttle Valve Seat Support Assembly	88V60-A303	25	Dead Handle	88V60-48
• 8	Air Strainer Screen	834-61		27	Arbor
• 10	Valve Seat	R4-159A	for 99V45 (Orange)		99V45-204-P10
11	Valve Seat Washer	99V60-155	for 99V60 (Blue)		99V60-204-P10
12	Valve Screw Lock Washer	H54U-352	for 99V77 (Green)		99V77-204-P10
13	Valve Seat Screw	PS3-83	for 99V85 (Red)		99V85-204-P10
14	Throttle Lever Pin	MR-100	30		Front Rotor Bearing
15	Locking Lever Assembly	88V60-A400	31	Front End Plate	99V60-11
16	Lever Lock	88V60-402			
17	Lever Lock Spring	88V60-405			
18	Lever Lock Pin	502B-120			
18A	Exhaust Diffuser (not used on 99V45 or 99V60)	99V77-123			

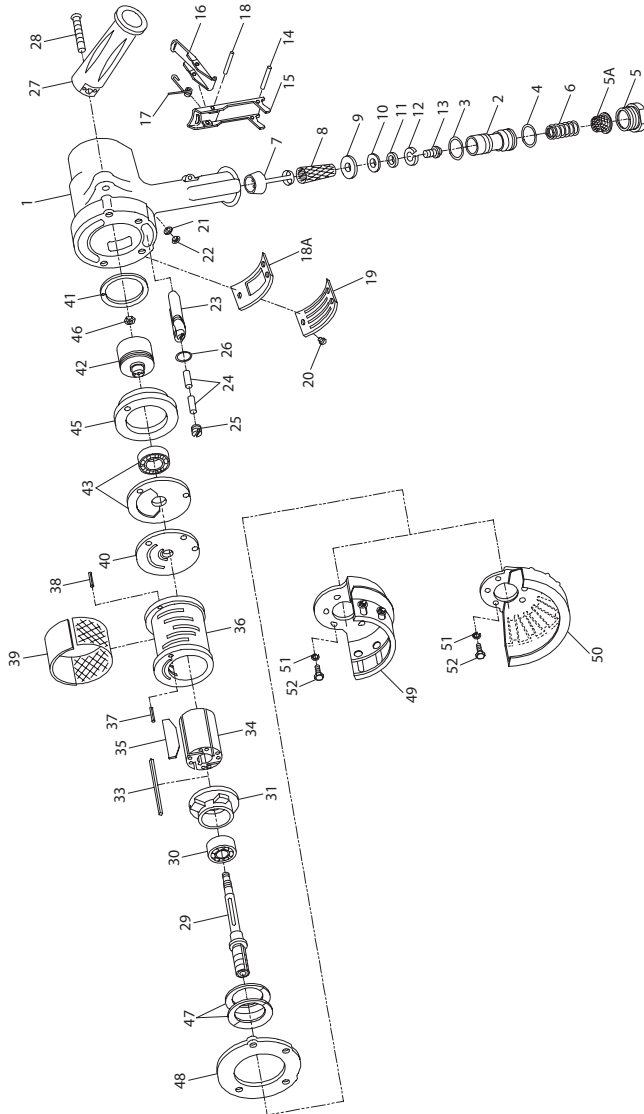
* Not Illustrated.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

‡ Whenever a new Cylinder Case Assembly is installed, select the correct Nameplate from the Nameplate Kit and attach it to the Cylinder Case with the Nameplate Screws.

99V Series Air Grinder Exploded Diagram

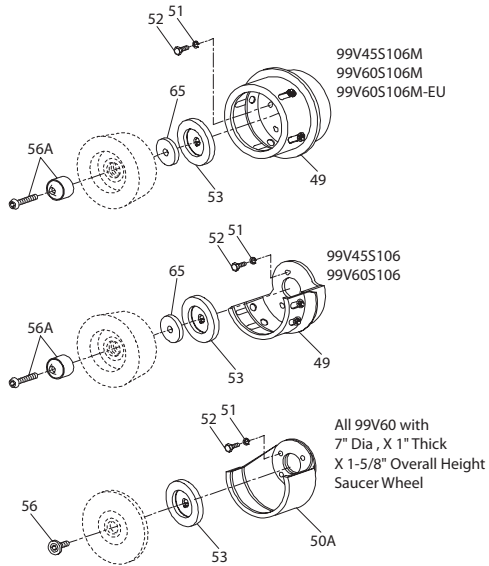
Use this drawing with part listing for models with built-in oilers



(Dwg. TPA717-3)

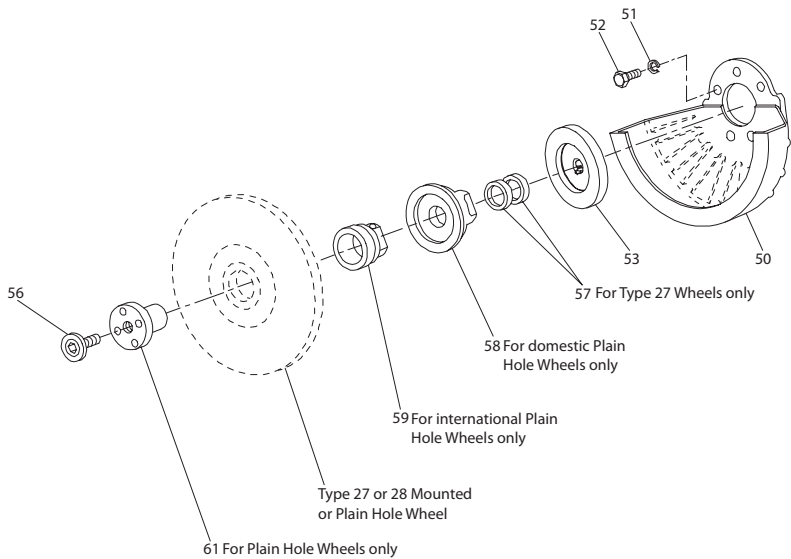
99V Series Air Grinder Exploded Diagram

Guards, Flanges and Spacers for 99V Grinders using Cup and Saucer Wheels



(Dwg. TPA862-3)

Guards, Flanges and Spacers for 99V Grinders using depressed Center Wheels



(Dwg. TPA862-3)

99V Series Air Grinder Parts List

Use This Part Listing With Drawing TPA717-3 For Models With Built-in Oilers

Item	Part Description	Part Number	Item	Part Description	Part Number
‡ 1	Cylinder Case Assembly		*	Nameplate Screw (for European compliant models) (4)	BN403-302
2	Throttle Valve Assembly	99V60-A302			
† 3	Small Seal	AFH120A-358	*	Warning Label (for European compliant models)	EU-99
† 4	Large Seal	C321-606			
† • 5	Inlet Bushing	88V60-38	*	Nameplate Kit (for domestic models)	99V-K301A
5A	Inlet Bushing Screen	834-61		Nameplate Screw (4)	BN403-302
• 6	Throttle Valve Spring	99V60-262		Warning Label	WARNING-4-99
7	Throttle Valve Seat Support Assembly	99V60-A303	† 21	Oiler Chamber Plug Washer	R3-92A
† • 8	Air Strainer Screen	99V60-61	22	Oiler Chamber Plug	231-665
9	Valve Seat Cap	R4-157	23	Oiler Assembly	99V60-A198
† • 10	Valve Seat	R4-159A	† 24	Oiler Felt (2)	R1-75
11	Valve Seat Washer	99V60-155	25	Oiler Adjusting Screw	R1-71A
12	Valve Seat Lock Washer	H54U-352	† 26	Oiler Body Seal	HRA20A-117
13	Valve Seat Screw	99V60-83	27	Dead Handle	99V60-48
• 14	Throttle Lever Pin	MR-100	28	Dead Handle Screw	99V60-634
15	Locking Lever Assembly	99V60-A400A	29	Arbor	
16	Lever Lock	88V60-402		for 99V45 (Orange)	99V45-204-P10
17	Lever Lock Spring	88V60-405		for 99V60 (Blue)	99V60-204-P10
18	Lever Lock Pin	502B-120		for 99V77 (Green)	99V77-204-P10
				for 99V85 (Red)	99V85-204-P10
18A	Exhaust Diffuser (not used on 99V45 or 99V60)	99V77-123	30	Front Rotor Bearing	R380-105
19	Exhaust Deflector	99V60-23	31	Front End Plate	99V60-11
20	Exhaust Deflector Screw (3)	99V60-200			
*	Nameplate Kit (for European compliant models)	99V-EU-K301A			

* Not Illustrated.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

‡ Whenever a new Cylinder Case Assembly is installed, select the correct Nameplate from the Nameplate Kit and attach it to the Cylinder Case with the Nameplate Screws.

† Indicates Tune-up Kit part.

Use this part listing for all models

Item	Part Description	Part Number	Item	Part Description	Part Number
• 33	Rotor Key	R43F-70	47	Motor Clamp Belleville Washer (2)	99V60-207
34	Rotor	99V60-53	† • 48	Cylinder Case Gasket	99V60-283
† • 35	Vane Packet (set of 4 Vanes)	99V60-42-4	49	Cup Wheel Guard	
36	Cylinder Assembly	99V60-A3		for 5" or 6" Cup Wheels	99V60-A216A
37	End Plate Dowel	5040-6		for 130 or 150 mm Cup Wheels	99V60-A216MA
38	Cylinder Dowel	502B-120	50	Depressed Center Wheel Guard for Type 27 or Type 28 Wheels	
39	Exhaust Silencer	99V60-311		for 9" or 230 mm	99V60-106-9
40	Rear End Plate	99V60-A12		for 7" or 180 mm	99V77-106-7
† • 41	Rear End Plate Gasket	99V60-739	50A	Saucer Wheel Guard (for 7" diameter x 1" thick x 1-5/8" over all height Saucer Wheel)	99V60-206-7
42	Controller Assembly (consists of Controller and Rotor Bearing Seal Assembly)		51	Cylinder Case Screw Lock Washer (4)	10BM-67
	for 99V45 (4500 rpm) (Orange)	99V45-A524	52	Cylinder Case Screw (4)	99V60-638
	for 99V60 (6000 rpm) (Blue)	99V60-A524	53	Autobalancer Assembly	99V60-A713
	for 99V77 (7700 rpm) (Green)	99V77-A524	54	Autobalancer Wrench (7/8" single-end; open-end wrench)	88V60-169
	for 99V85 (8500 rpm) (Red)	99V85-A524	56	Wheel Retaining Screw	
43	Rotor Bearing Seal Assembly (consists of Rear Rotor Bearing and Rotor Bearing Seal)	99V60-A28A		for all Type 27 and Type 28 Wheels	99V60-219
45	Rotor Bearing Cage	99V60-107A		for 7" diameter x 1" thick x 1-5/8" overall height Saucer Wheels	99V60-119
46	Controller Retaining Nut				
	for 99V45 and 99V85	R4-120			
	for all others	G8-120A			

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

† Indicates Tune-up Kit part.

Use this part listing for all models

Item	Part Description	Part Number	Item	Part Description	Part Number
56A	Wheel Retaining Screw Assembly (for all Type 6 and Type 11 Wheels)	99V60-A219C	*	Piped-Away Exhaust Kit	99V60-K184
				Exhaust Hose	99V60-184
57	Depressed Center Wheel Spacer (for Type 27 Plain Hole Wheels) (2)	99V-286		Exhaust Hose Clamp	DG30-67
58	Depressed Center Wheel Flange (for 7" and 9" diameter Type 27 and Type 28 Plain Hole Wheels)	99V60-386		Exhaust Elbow	99V60-167
				Exhaust Elbow Gasket	99V60-49
				Exhaust Elbow Screw (3)	FEA100-112
				Exhaust Hose Band (4)	99V60-927
59	Depressed Center Wheel Flange (for 99V60P107M, 99V60P109M and 99V85P107M Type 27 Plain Hole Depressed Center Wheels)	99V60-386-M		Exhaust Hose Band Screw (4)	MT1-36-7/8
				Nut (6)	G8-120A
				Screw (2)	JC3350-103
60	Depressed Center Wheel Nut	99V85-186	*	Tune-up Kit (for models with built-in oiler) (includes illustrated parts 3, 4 [2], 5A [2], 8, 10, 21, 24 [2], 26, 35, 41 and 48)	99V/99H-TK3
62	Depressed Center Wheel Nut Spanner Wrench	D32-26	*	Exhaust Deflector Screw Wrench (1/8" hex)	R2J-562
63	Depressed Center Wheel Flange Wrench (for 99V60P107M,99V60P109M and 99V85P107M) (1" x 15/16" double-end; open-end wrench)	7RAQT4-254	*	Maintenance Tool Kit	99V60-K950
				Controller Wrench	99V60-950
				Seal Pressing Tool	99V60-951
				Bearing Clamp	99V60-A952
65	Flange (for 99V45S106M, 99V60S106M, 99V45S106M-EU, 99V45S106, and 99V60S106)	88V60-86A	*	Wheel Retaining Screw Wrench (5/32" hex)	88V-562

* Not Illustrated.

Parts and Maintenance

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

Tool repair and maintenance should only be carried out by an authorized Service Center.

Refer all communications to the nearest **Ingersoll Rand** Office or Distributor.

Related Documentation

For additional information refer to:

Product Safety Information Manual 04584959.

Product Information Manuals 16573222 and 16576092.

Maintenance Information Manual 16573370.

Manuals can be downloaded from www.ingersollrandproducts.com.

www.ingersollrandproducts.com

© 2009 **Ingersoll Rand** Company

