

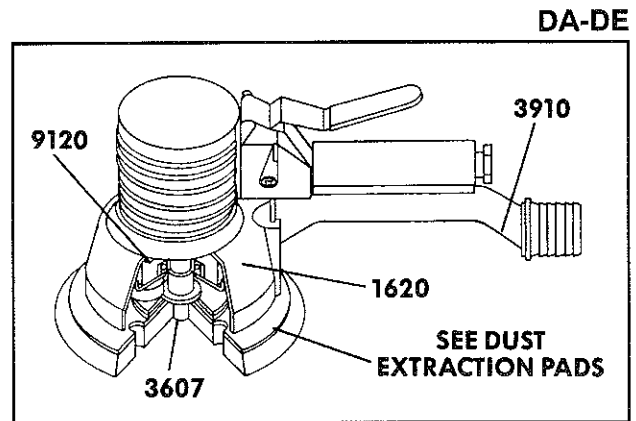
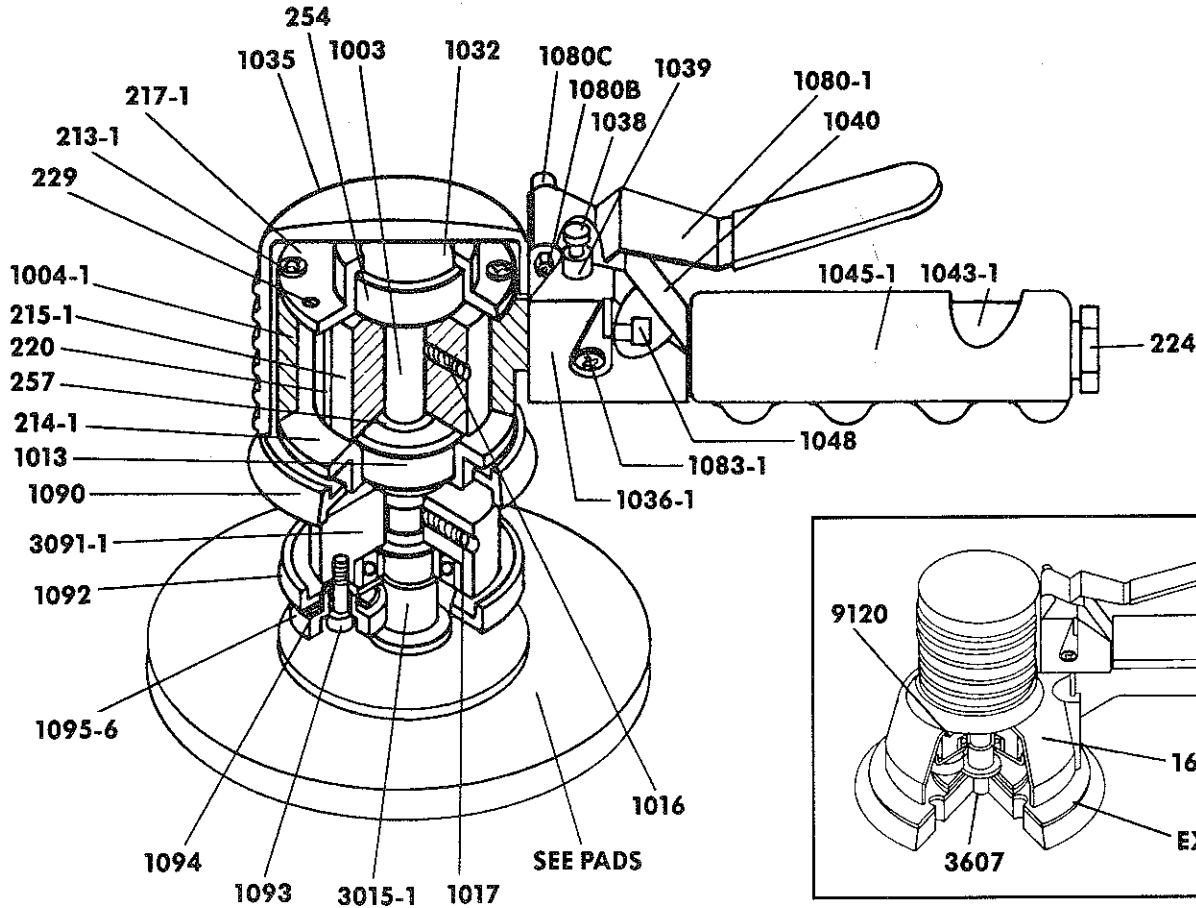


# National Detroit, Inc.

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**MODEL DA  
 DA-DE**

**Shipping Address:  
 1590 Northrock Court  
 Rockford, IL 61103**



**Part No. Description**

- 213-1 Motor Screw with 267 Nut and 1030-B Lockwasher (4)
- 214-1 Lower Bearing Plate only
- 3214 214-1 Lower Bearing Plate with 1013 Bearing
- 215-1 Motor Rotor
- 217-1 Upper Motor Bearing Plate only
- 1217 Upper Motor Bearing Plate with 254 Bearing & 1032 Gasket
- 220 Rotor Blade (4)
- 224 Screen Plug
- 229 Dowel Pin (4)
- 246-1 Valve Spring
- 250 Valve Pipe Plug (Not Shown)
- 254 Ball Bearing, Upper Motor
- 257 Shim (sizes available .001 thru .006, .010 and .015)
- 1003 Motor Rotor Shaft (DA and DAQ)
- 1004-1 Motor Cylinder
- 1013 Ball Bearing, Lower Motor
- 1016 Rotor Set Screw
- 1017 Set Screws for Drive Head (2)
- 1032 Metal Gasket, Upper Motor Bearing
- 1035 Cover, Neoprene
- 1036-1 Valve Assembly complete with 1083-1
- 1037 Valve Ball
- 1038 Valve Stem
- 1039 Valve Stem Sleeve
- 1040 Valve Lever

**Part No. Description**

- 1042 Valve Lever Jam Nut
- 1043-1 Handle
- 1045-1 Handle Grip
- 1048 Valve Attaching Screw & Washer (2)
- 1080-1 Valve Lever Booster Assembly
- 1080-B Valve Lever Nut
- 1080-C Valve Lever Screw
- 1083-1 Speed Control Regulator Assembly
- 1090 Skirt
- 1092 Lock Ring
- 1093 Screw, Lock Ring Attaching
- 1094 Tension Washer
- 1095-6 Balance Weight
- 3015-1 Bearing and Shaft Assembly
- 3091-1 DA Head Assembly, complete

**Dust Extraction Parts**

- 1550 DE Conversion Kit with 5" Pad
- 1650 DE Conversion Kit with 6" Pad
- 3910 Air Tube Handle
- 1620 Shroud
- 3606 5/32 Allen Wrench
- 3607 Pad Shaft Screw
- 9120 Mounting Screws (4)

**See other side for pad information**

MODEL	PAD DESCRIPTION	SIZE			
		3 INCH	4 INCH	5 INCH	6 INCH
DA 5/16 – 24 Stud	Glue on (Canvas)		3062-4	3062-5	3062-6
	PSA (Vinyl)	4062-3	4062-4	4062-5	4062-6
	PSA Tapered Edge Fiber Backed			4042-5	4042-6
	Hook and Loop	3977-3	3977-4	3977-5	3977-6
	Hook and Loop Tapered Edge Fiber Backed			4047-5	4047-6
	Molded Glue On (Canvas)			3662-5	3662-6
	Molded PSA (Vinyl)	4862-3		4862-5	4862-6
	Molded Hook and Loop	4677-3		4677-5	4677-6
DA-DE 5/16 – 24 (Female)	PSA (Vinyl)			4562-5	4662-6
	PSA Tapered Edge Fiber Backed			4082-5	4082-6
	Hook and Loop			4977-5	4977-6
	Hook and Loop Tapered Edge Fiber Backed			4087-5	4087-6
	Molded PSA (Vinyl)			4882-5	4882-6
	Molded Hook and Loop			4877-5	4877-6

## Pads

(Use National Detroit pads only. Sanders are balanced for use with these pads.)

See pad and abrasive application sheet. Contact National Detroit with details of special requirements for factory recommendations.

# NATIONAL DETROIT MODEL DA DUAL ACTION SANDER OPERATING INSTRUCTIONS

This dual action tool has all the power needed for forming and shaping all material. It can be used to sand primer surface sealers, old finishes, oxidized paint, and road film. The smooth action eliminates hand sanding for final plastic patch finishing, for drop coats, base coats, fine feather edging and polishing clear coats.

**LOCK RING:** The patented lock ring on the driving head is used to remove and replace the pad. Push the lock ring in at the "Push Lock" mark to lock the pad shaft to remove and replace the pad. Push the lock ring at "Push Unlock" after pad replacement. This permits the pad shaft to turn free for proper action.

**AIR PRESSURE:** 60 PSI maximum at the sander. Excessive air pressure can retard sanding efficiency. When connected to higher air pressure, adjust the speed control lever on the left side of the valve for best operating speed. Running the sander "free or wild" on higher air pressure can

result in injury or damage.

Never run the sander off the work.

**LUBRICATION:** Lubrication should be performed daily. Put several drops of light oil (10 weight) through the air intake daily. This will prolong the tool life and prevent rust formation in the motor. If the tool is used in conjunction with an air line oiler, it should be adjusted to admit no more than 1 drop every 5 minutes. Excessive oil flow can cause an oil film deposit on the work.

**MOISTURE AND FILTER TRAP:** Clean dry air is important to prevent rust and excessive wear. Use a good line filter on each outlet. Open petcock every morning to drain accumulated water. Keep the intake filter on your air compressor clean, or plastic and paint dust will be drawn into the air lines. Drain water and sludge from compressor storage tank every day.

## SERVICING INSTRUCTIONS

**REMOVING DRIVE HEAD ASSEMBLY:** Loosen two (2) Set Screws Part 1017 under Instruction Tape and Assembly comes free of Motor Rotor Shaft.

Lock Ring Part 1092 is removed by unscrewing Attaching Screw Part 1093. Note position of flange on Lock Ring for proper reassembling. See sketch for position of parts. Securely tighten screw.

Part Number 3015-1 (Bearing and Shaft Assembly) is removed by pressing out of DA Head. When reassembling be sure pressure is on rim of bearing's outer race only, otherwise bearing will be damaged. Stake 4 locations on Housing Rim. File off burr before reassembling Lock Ring.

**DISASSEMBLING AIR MOTOR:** Cover is removed by pulling up over Motor and Air Valve. Motor disassembled by removing four (4) Motor Screws, Part 213-1. Hold Motor in hand and tap Rotor Shaft Part 1003 with soft nose hammer to disengage Upper and Lower Motor Bearing Plates from Motor Cylinder. **CAUTION—Do not bend Dowel Pins. If Dowel Pins remain in Motor Cylinder do not damage in removing.**

Remove Rotor Blades Part 220 from slots in Rotor.

To remove Upper Motor Bearing Plate from Bearing and Rotor Assembly, place support under Plate and press on Bearing, Part 254.

When removing the Motor Bearings and Rotor from Rotor Shaft, loosen Set Screw in Rotor. There are Shim Washers of varying thickness between Bearings and Rotor, at each end. **NEW BEARINGS REQUIRE RESPACING.**

Press Rotor and Shaft Assembly into Lower Motor Bearing Plate, Part 214-1.

Insert Rotor Blades Part 220 in Rotor slots with straight edge out. Turn Rotor Shaft by hand to be sure Blades do not bind. Press Upper Motor Bearing Plate onto Rotor Shaft with proper Shims in place. Apply pressure on Inner Race of Bearing (to prevent brinelling) until bearing is full-seated on Rotor Shaft. Insert Dowel Pins. **CAUTION—Insert but do not tighten Motor Screws, Part 213-1. Connect air line to sander and run Air Motor to be sure nothing binds. Tighten Motor Screws.**

**CAUTION: READ AND OBSERVE THE ENCLOSED WARNINGS AND SAFETY RULES FOR SAFE OPERATION.**