



**16574071**  
Edition 5  
May 2015

# **Air Grinder, Sander and Polisher**

**77A Series**

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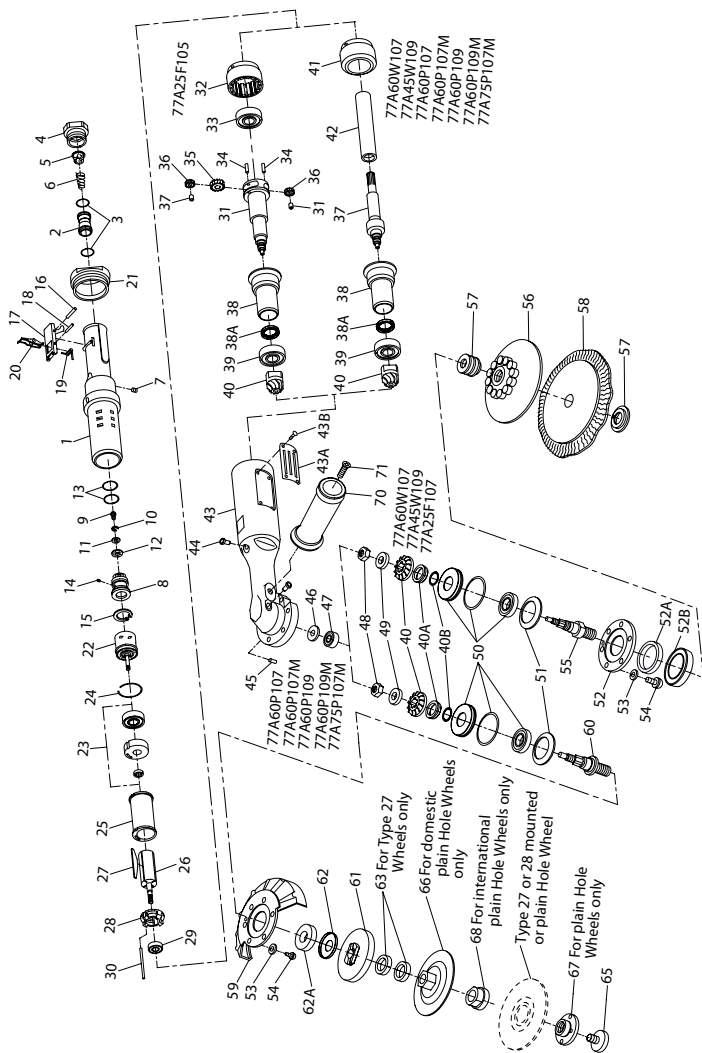
## **Parts Information**



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 **Ingersoll Rand®**

# 77A Angle Grinder, Sander and Polisher Exploded Diagram



(Dwg. TPA793-7)

## 77A Angle Grinder, Sander and Polisher Parts List

| Item   | Part Description   | Part Number    | Item | Part Description  | Part Number  |
|--------|--|----------------|------|---|--------------|
| 1      | Throttle Handle Assembly   | 77H-A160       | 43B  | Nameplate Screw (4)   | BN403-302    |
| 2      | Throttle Valve Assembly  | 88V60-A302     | *    | Warning Label   |              |
| † • 3  | Seal (2)   | C321-606       |      | for Grinders ending in -EU  | EU-99        |
| 4      | Inlet Bushing  | 77H-38         |      | for all other Grinders  | WARNING-4-99 |
| † • 5  | Inlet Bushing Screen   | 834-61         |      | for Sanders and Polishers ending in -EU   | EU-99        |
| † 6    | Throttle Valve Spring  | 77H-262        |      | for all other Sanders and Grinders  | WARNING-5-99 |
| 7      | Oil Chamber Plug   | R2-227         | 44   | Grease Fitting (2)  | 130SR-188    |
| 8      | Throttle Valve Seat Support Assembly   | 77H-A303       | 45   | Mounting Plate Pin  | 77A-31       |
| 9      | Valve Seat Screw   | PS3-83         | • 46 | Upper Bearing Spring Washer   | 4U-278       |
| 10     | Valve Seat Lock Washer   | H54U-352       | • 47 | Upper Arbor Bearing   | WWA100-97    |
| 11     | Valve Seat Washer  | 99V-155        | 48   | Bevel Gear Nut  | 77A-578      |
| † • 12 | Valve Seat   | R4-159A        | 49   | Bevel Gear Spacer   | 77A-25       |
| † 13   | Valve Support Seal (2)   | SPP101-743     | 50   | Arbor Lower Bearing Assembly  | 77A-A593     |
| 14     | Oiler Feeder Plug  | 77H-75         | 51   | Lower Arbor Spring Washer   | 77A-307      |
| 15     | Throttle Valve Seat Support Retainer   | W64-118        | 52   | Sander Arbor Retaining Plate  | 77A-55       |
| 16     | Throttle Lever Pin   | MR-100         | 52A  | Washer  | R4-35        |
| 17     | Throttle Lever Assembly  | 77H-A400       | 52B  | Felt Wiper Cup  | 77A-35B      |
| 18     | Lever Lock Pin   | R100B-120      | 53   | Screw Lock Washer (6)   | 88H60-67     |
| 19     | Lever Lock Spring  | DG120-405      | 54   | Guard Screw or Retaining Plate Screw (6)  | 77H-638      |
| 20     | Lever Lock   | DG120-402      | 55   | Sander Arbor  | 77A-204-P10  |
| 21     | Coupling Nut   | 77H-282        | 56   | Sanding Pad Assembly  |              |
| † 22   | Controller Assembly (Consists of Controller and Rear End Plate Assembly)                 |                |      | with 5" Sanding Pad   | 77A-AM825-5  |
|        | for 77A45W109  | 77H90-A524RH   |      | with 7" Sanding Pad (medium)  | 77A-AM825-7  |
|        | for 77A60W107, 77A60P107, 77A60P107M, 77A60P109 and 77A60P109M                           | 77H120-A524RH  |      | with 7" Sanding Pad (firm)  | 77A-BM825-7  |
|        |  |                |      | with 9" Sanding Pad   | 77A-AM825-9  |
|        |  |                | 57   | Pad Mounting Kit  | 77A-826      |
|        |  |                | 58   | Wool Bonnet (for 77A25F107)   | P500-850     |
| 23     | Rear End Plate Assembly (consists of rear end plate, rotor bearing and required spacers) | 77H-A12        | 59   | Depressed Center Wheel Guard  |              |
|        |  |                |      | for 7" diameter wheels  | 77A-106-7    |
|        |  |                |      | for 9" diameter wheels  | 77A-106-9    |
| † • 24 | Rear End Plate Gasket  | 77H-739        | 60   | Depressed Center Wheel Arbor  | 77A-4-B10    |
| 25     | Cylinder   | 77H-3          | 61   | Autobalancer Assembly   | 99V60-A713   |
| 26     | Rotor  | 77H-53RH       | *    | Autobalancer Wrench (7/8" single end; open-end wrench)  | 88V60-169    |
| † • 27 | Vane Packet (set of 4 Vanes)   | 77H-42-4       |      |   |              |
| • 28   | Front End Plate  | 77H-11         | 62   | Felt Wiper Cup  | 77A-35B      |
| 29     | Front Rotor Bearing  | 77H-24         | 62A  | Dust Washer   | R4-35        |
| 30     | Cylinder Dowel   | 77H-98         | 63   | Depressed Center Wheel Spacer (2 for all Type 27 Mounted Wheels)  | 99V-286      |
| 31     | Bevel Pinion Driver  |                | 65   | Wheel Retaining Screw (for all Type 27 and 28 Wheels)   | 99V60-219    |
|        | for 77A25F107  | 77A-8          |      |   |              |
|        | for all others   | 77A-7          | 66   | Depressed Center Wheel Flange (for Type 27 & 28 Plain Hole Wheels)  | 99V60-386    |
| 32     | Internal Gear  | 77H-406        | 67   | Depressed Center Wheel Nut (for Type 27 and 28 Plain Hole Wheels)   | 99V85-186    |
| 33     | Bevel Pinion Driver Bearing  | WFS182-97      | *    | Depressed Center Wheel Nut Spanner Wrench   | D32-26       |
| 34     | Planet Gear Shaft (2)  | G700-191       | *    | Wheel Flange Wrench (for all Grinders)  | 7RAQT4-254   |
| 35     | Rotor Pinion   | 77H-17         |      |   |              |
| 36     | Planet Gear Assembly (2)   | 77H-A10        | 68   | Depressed Center Wheel Flange (for 77A60P107M, 77A60P109M and 77A75P107M with Type 27 and Type 28 Plain Hole Depressed Center Wheels) | 99V60-386-M  |
| 37     | Planet Gear Bearing (one for each gear)  | G700-654       | 70   | Dead Handle   | 88V60-48     |
| 38     | Thrust Spacer  | 77A-104        | 71   | Dead Handle Screw   | 88V60-634    |
| 38A    | Seal, Grease   | 77A-271        | 72   | Nameplate   | 66H-301      |
| 39     | Bevel Pinion Bearing Assembly  | 77A-A510       | 73   | Nameplate Screw (4)   | BN403-302    |
| 40     | Matched Gear Set (Bevel Gear and Pinion not sold separately)                             | 77A-A552       | *    | Bearing Clamp Assembly  | 77H-A952     |
| 40A    | O-ring   | DAA40-606      | *    | Controller Wrench   | 77H-950      |
| 40B    | Seal, V-ring   | 77A-720        | *    | Throttle Valve Seat Support Retainer Pliers   | 77H-154      |
| 41     | Motor Spacer   | 77E-208-H8     | *    | Coupling Nut Wrench   | 77H-281      |
| 42     | Arbor Coupling   | 66H-304        | *    | 1/2" Pipe Tap Inlet Bushing   | 88V60-38     |
| † 43   | Angle Arbor Housing  |                | *    | Vibra-Tite*** 0.6 cc  | 5R-VT06      |
|        | for models ending in -EU   | 77A-EU-A40-P10 | *    | Adhesive Kit  | 77H-KVLT     |
|        | for all other models   | 77A-A40-P10    |      |   |              |
| 43A    | Nameplate Kit  |                |      | Tune-up Kit includes illustrated parts: (3 [2], 5, 6, 12, 13 [2], 24 and 27)  | 77H/77A-TK3  |
|        | for models ending in -EU   | 77A-EU-K301    |      | * Grease, Mobilux-EPO   | 77A-EPO      |
|        | for all other models   | 77A-K301       |      |   |              |

\* Indicates Not Illustrated.

• Indicates common-wear parts. Maintain stock to reduce downtime.

‡ Whenever a new Angle Arbor Housing is installed, select the correct Nameplate from the Nameplate Kit (43A) and attach it to the Housing with the Nameplate screws (43B).

† Indicates Tune-up Kit part.

# Early models of these Grinders had Rotors and Controller Assemblies with left-hand threads. If you have a model with left-hand threads, contact **Ingersoll Rand** when ordering replacement parts.

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## Parts and Maintenance

When tool life has expired, it is recommended that the tool be disassembled, degreased and parts separated by material for proper recycling.

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.

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## Related Documentation

Manuals can be downloaded from [ingersollrandproducts.com](http://ingersollrandproducts.com)

For additional information, refer to:

Air Grinder, Sander and Polisher Product Safety Information Manual 04580387 and 04584959.

Air Grinder, Sander and Polisher Product Information Manual 80221740, 80221757, 80221765 and 80221773.

Air Grinder, Sander and Polisher Maintenance Information Manual 16575128.

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