Hand-Held Scarifiers

Needleguns

Walk-Behind Scarifiers

Impact Tools

Sanders

Specialty Tools

Industrial Vacuums

7" Sander
Electric

151.121
151.129

151.220
151.229
200.3218

200.3217

Configurations

Part	Description	Dust Shroud	Backup Pad (Abrasive)
151.121	7" Sander	None	Hook & Loop (Conditioning Disc)
151.129	7" Sander	None	Center Nut (Coated Abrasive)
151.220	7" Sander	Floating Round	Hook & Loop (Conditioning Disc)
151.229	7" Sander	Floating Round	Center Nut (Coated Abrasive)
200.3217	7" Sander	Floating Bullnose*	None (Diamond Cup Wheel)
200.3218	7" Sander	Floating Round	None (Diamond Cup Wheel)

*Bullnose available only for use with diamond cup wheels (other abrasives do not fit).

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Introduction

The Desco Pneumatic 7" Sander is a quality power tool available with highly effective dust collection. The tool is lightweight and affords the user maximum ease and efficiency in a variety of applications. As with any product of a quality manufacture, service life largely depends on correct handling. These instructions are prepared to help you obtain maximum safety and performance at all times.

Main Applications

- De-slagging welds
- Stripping paint
- Cleaning castings
- Removing rust & corrosion
- Feathering edges

Technical Specifications

Power required:	120v, 15amp
Weight:	11.5 lbs (without shroud or backup pad)
Length:	19.5"
Speed, no load:	6,600rpm
Spindle size:	5/8"-11

Important Safety Information

Read and understand all of the safety precautions, warnings and operating instructions in the instruction manual before operating or maintaining this power tool.

Most accidents that result from power tool operation and maintenance are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures

Basic safety precautions are outlined in the Safety section of this instruction manual and in the section which contain the operation and maintenance instructions.

Hazards that must be avoided to prevent bodily injury or machine damage are identified by warnings on the power tool and in this instruction manual.

Basic Safety Rules

WARNING Read and understand all instructions
Failure to follow all instructions listed below may result in damage to the tool and/or serious personal injury.

Work Area

1. **Keep work area clean and well lit**. Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres**, such as in the presence of flammable liquids, gasses, or dust. Power tools create sparks which may ignite dust or fumes.
3. **Keep bystanders away** while operating a power tool.

Personal Safety

1. **Stay alert**, watch what you are doing and use common sense when operating a power tool. Do not operate tool when tired or substance impaired.
2. **Dress properly.** Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing and hands away from moving parts.
3. **Use safety equipment**. Always wear eye protection. Other precautions may be required depending on the situation. These include: ear protection (ear plugs) vibration protection (gloves), steel toe shoes or hard hats.
4. **Avoid accidental starting**. Be sure the switch is off before attaching to power source.
5. **Do not overreach**. Keep proper footing and balance at all times.

Tool Use and Care

1. **Secure the work.** Use clamps or other securing method to firmly hold work to a stable platform. Do not attempt to hold work in one hand and operate the tool with the other hand.
2. **Do not force tool.** Apply light hold down pressure and let the tool do the work. Use the correct tool for your application.
3. **Do not tape trigger closed** to fashion a trigger lock. If you drop or otherwise loose control of the tool, it will continue to run and may cause dangerous results.
4. **Disconnect from power source before making adjustments** or changing accessories. Failure to disconnect may result in injury if the tool were to accidentally start while adjusting.
5. **Store tools out of reach of untrained persons.** Tools are dangerous in the hands of untrained users.
6. **Maintain tools with care**. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
7. **Check for misaligned or binding of moving parts**, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Operation

Prior to Operation

1) **Check your work environment** – Ensure the following before operation:
   - No flammable gas or liquid at worksite.
   - Work piece secured to prevent unwanted movement
   - Area cleared of children or unauthorized personnel.
2) **Observe abrasive speed rating** – Use only abrasives rated to run at 4,500 rpm or greater.
3) **Check air supply**
   - *Air Pressure and Volume* – 80-90 PSI air pressure at a minimum of 18 CFM is recommended for the most efficient performance. Air pressure that is too high will shorten the tool's life.
   - *Dry and Clean Air* – For proper performance and tool life, it's critical to provide clean, dry air to the tool. If moisture is present, utilize filter/dryer at air station or between compressor and air hook-up.
   - *Air Hose and Fittings* – Insure hoses and fittings are in good condition with no leaks in fittings or hose. Due to static pressure drop with increased hose length, ½" or ¾" hoses are recommended whenever exceeding 50 feet in length. Larger ½" body fittings are also recommended as they allow more airflow and are less restrictive**.**

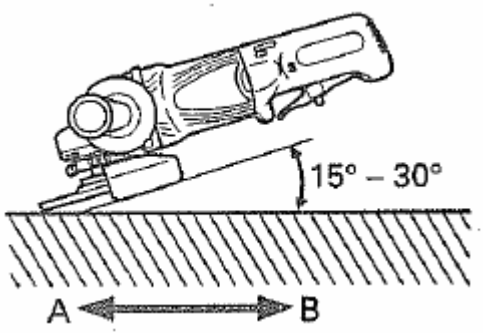
Grinder Operation

1) **Hold the grinder firmly with both hands**. One hand on the tool body handle and the other on the side handle.
2) **Safety Lock-off Switch**
   - The power switch has a safety lock-off that is designed to prevent accidental starting.
   - To start the tool, push the red lock-release button forward, then pull the black trigger lever.
   - To stop the tool, release the black trigger lever.
   - A trigger lock is integrated into the lock-off switch. To set the trigger lock, hold the lock-release button while pulling the trigger lever. To release the trigger lock, pull and release the trigger lever.

3) **Use light grinding pressure** – There is no need to press hard when grinding. Usually the grinder's own weight is sufficient to allow the required light contact with the surface to be grinded. Let the tool do the work.

WARNING: Do not press the grinder forcibly against the surface to be ground. Heavy pressure can result in wheel breakage and serious injury. It can also damage the surface being ground or damage the grinder's motor.

4) **Use proper grinding angle and motion:**
   - Grind only with the wheel's edge by lifting the grinder 15° to 30° as shown below.
   - Move the grinder in the proper direction. When using a new abrasive wheel in direction A, the wheel edge may cut into the work piece. In this case, grind in direction B. Once the wheel edge is worn, the work piece can be ground in both directions.



Changing Abrasives

Changing abrasives is a simple procedure as described below. However, when you change abrasive type, additional setup is often required. For example, if you change from coated abrasives to conditioning discs, you will also need to change the backup pad and shaft extension. For more information on this topic, see *Backup Pad and Shaft Extension Usage* later in this document.

Spindle Lock

A spindle lock is located on the top of the motor as shown below. Press the button to hold the spindle in place while changing abrasives.

Setup for Coated Abrasives

1) Disconnect tool from power source.
2) Lay the tool on its back on a suitable work surface.

3) Mount center-nut style backup pad by threading on to spindle while holding spindle lock.

4) Mount abrasive centered on backup pad.

5) Install center-nut and tighten with spanner wrench while holding spindle lock.

Setup for Conditioning Discs

1) Disconnect tool from power source.
2) Lay the tool on its back on a suitable work surface.

3) Mount hook and loop style backup pad by threading on to spindle while holding spindle lock.

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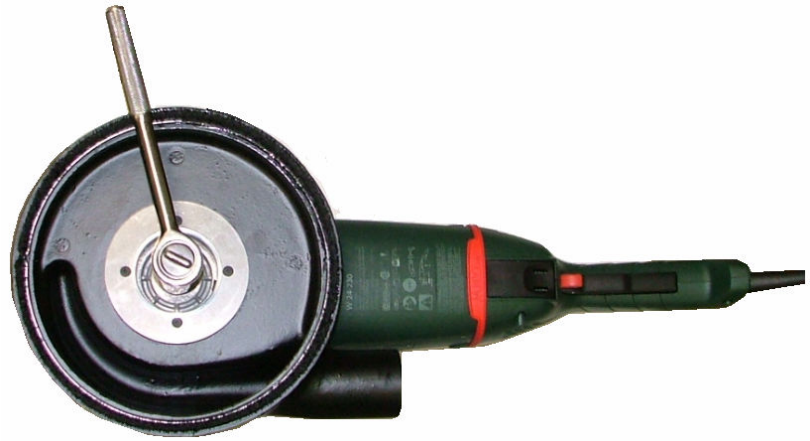
4) Mount the conditioning or BPH disc centered on the back up pad. Once installed, place tool face down with abrasive on a flat surface and apply pressure to the head of the tool to fully engage and secure the disc to the back up pad. Failure to center the disc and secure to back up pad may cause the tool to vibrate and cause the disc to fly off the tool.

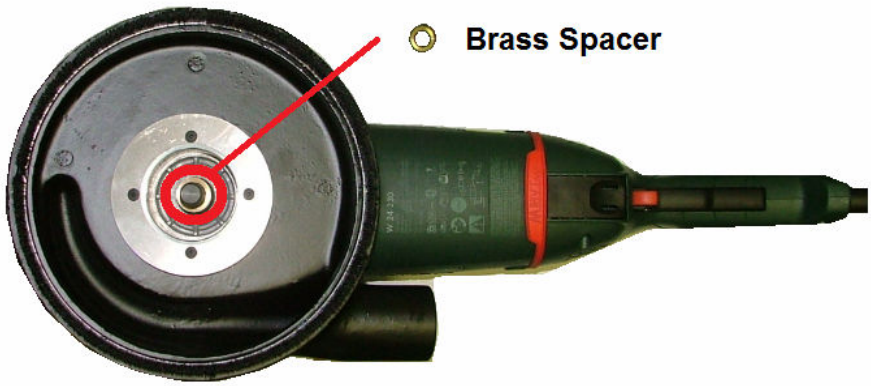
Setup for Diamond Cup Wheels

1) Disconnect tool from power source.
2) Lay the tool on its back on a suitable work surface.

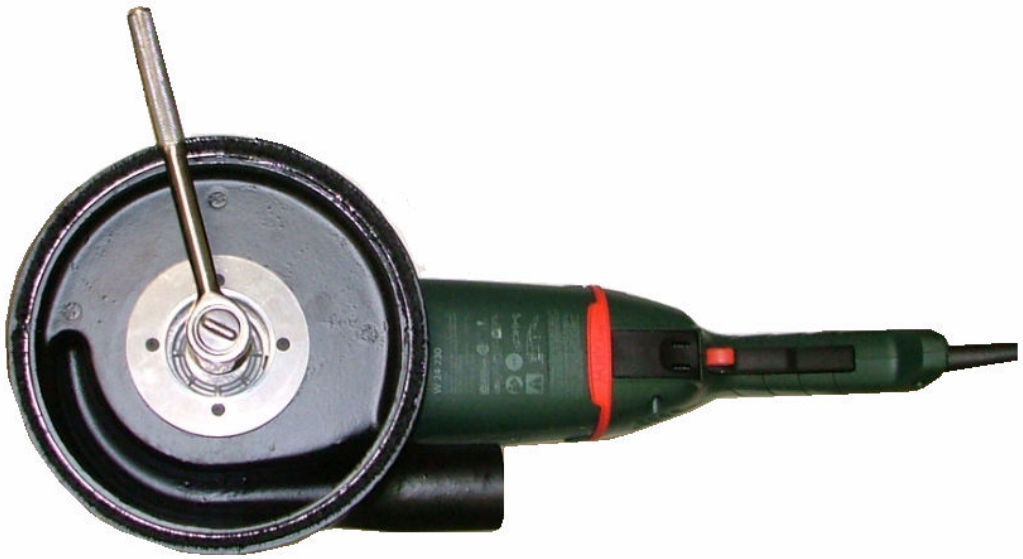
3) Remove jam nut from spindle while holding spindle lock, set aside.



4) Insert brass spacer.



5) Replace jam nut over spacer and tighten with ¾" wrench while holding spindle lock.



6) Install diamond cup wheel by threading on to spindle while holding spindle lock.

Backup Pad and Shaft Extension Usage

To ensure effective dust collection, the dust shroud must be in contact with the work surface during operation. However, backup pads and abrasive discs vary in thickness. Shaft extensions of various lengths were developed to accommodate this variable thickness. Please see the table below for shaft extension usage.

7" Grinder Setup, Round and Bullnose Shroud

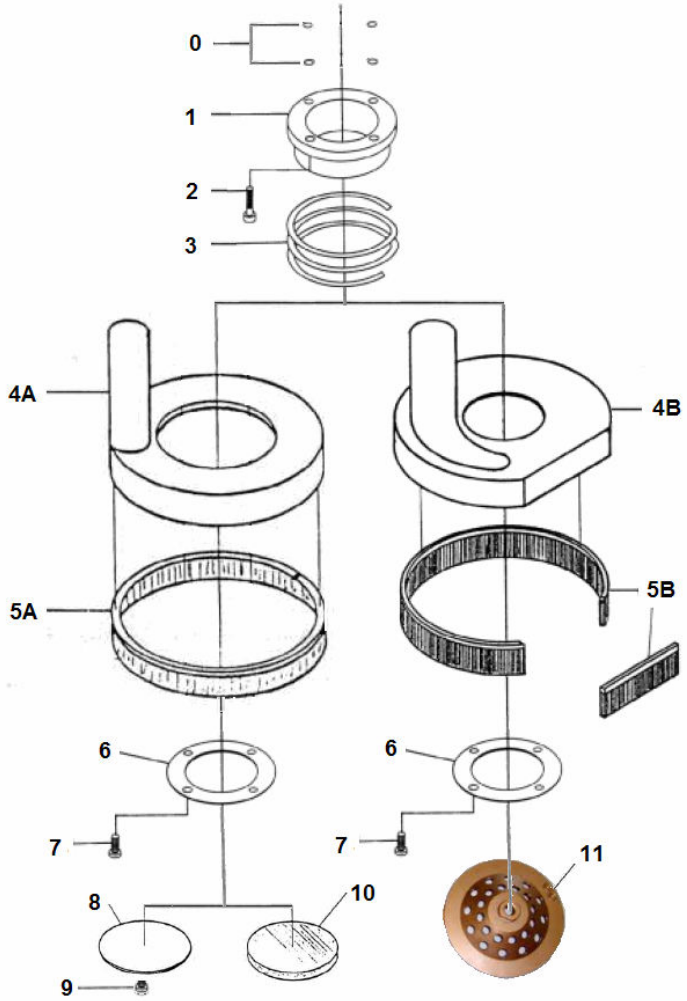
Backup Pad	Abrasive		Shaft Setup	
	Type	Part	Air Tool	Electric Tool
Hook&Loop (820.009)	BPH Disc	810.751	**N/A**	Jam Nut (500.002)
Hook&Loop (820.009)	Conditioning Disc	810.710 810.711 810.712 810.714 810.715	Jam Nut (500.002)	Jam Nut (500.002)
2 Piece Center Nut (850.035)	Diamond Disc	850.006 850.007 850.010 850.011	Jam Nut (500.002)	Jam Nut (500.002) & Brass Spacer (200.012)
200.016 w/Center Nut (500.071)	Coated Abrasive	815.7416 815.7424 815.7436 815.7450 815.7480	Shaft "E" (500.235)	Shaft "C" (500.230)
200.016 w/Center Nut (500.071)	Rip Disc	200.017	Shaft "E" (500.235)	Shaft "C" (500.230)

Tool Stowage

Avoid storing tools in locations subject to high humidity. If tool is stored in such environment over extended duration without proper lubrication, residual internal moisture will result in corrosion. After operation and before storing, always wipe down tool to make sure it is free of grease, dirt and grime. Immediately following, place 2 drops of oil in tool air inlet and run motor for 1 to 2 seconds to spread lubrication throughout motor.

Schematics

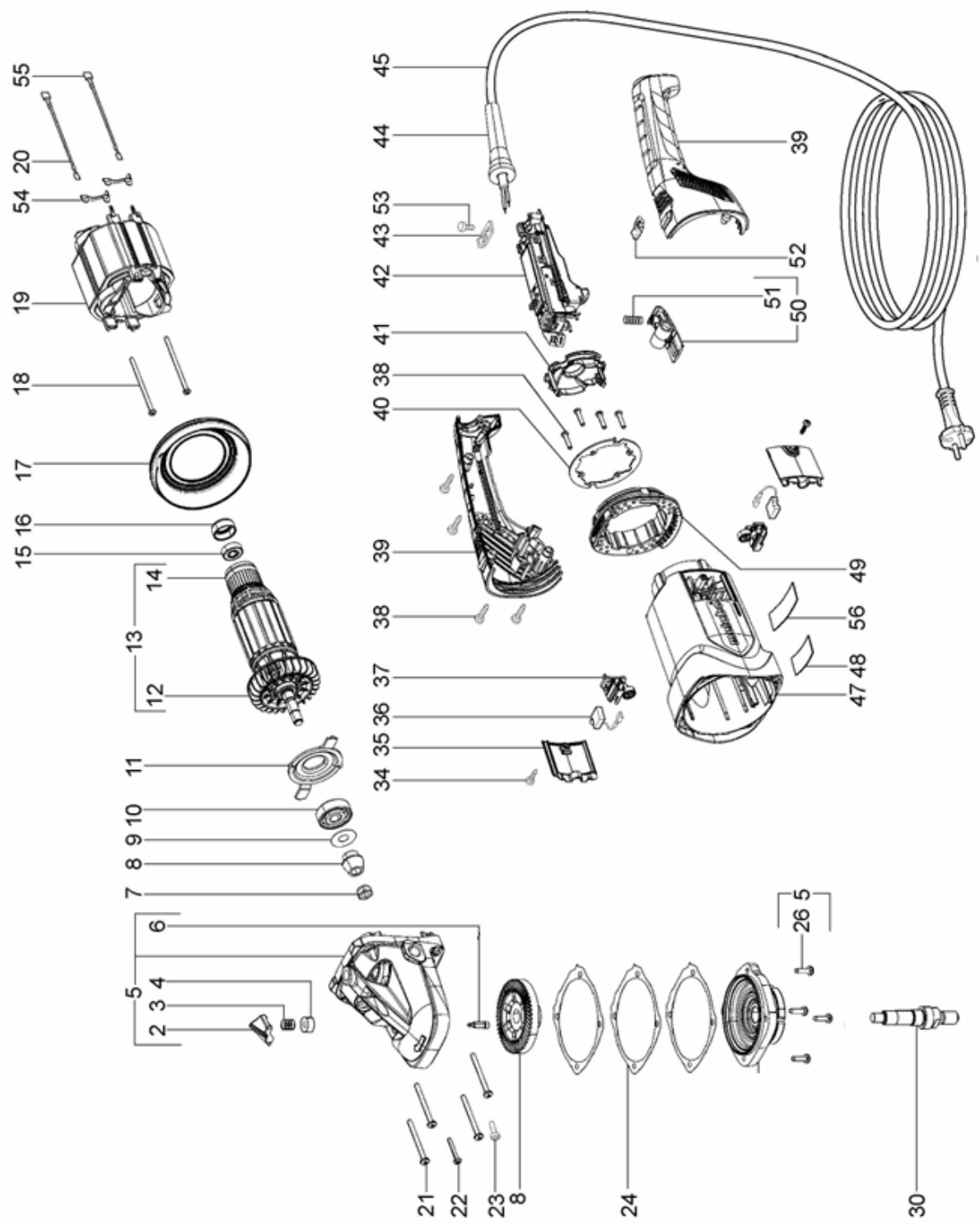
7" Dust Collector Schematic (Electric)



Ref	Part	Description
0	777.011	Spacer, (4 required)
1	200.014	Cup Adapter
2	750.107	Bolt (4)
3	151.006	Spring
4A	151.007	Shroud, round
4B	200.004	Shroud, bullnose
5A	150.003	Brush set, round shroud
5B	200.010	Brush set, bullnose shroud
6	200.001	Retaining plate
7	750.070	Bolt (4)
8	500.153	Backup pad, 7", center nut style (for coated abrasives)
9	500.071	Center nut
10	820.009	Backup pad, 7", hook & loop style (for conditioning discs)
11	850.series	Diamond cup wheel, 7" (only abrasive available for bullnose)

Grinder Schematic

Electric Motor Part: 700.121
Used in Parts: 151.121, 151.129, 151.220, 151.229, 200.3217, 200.3218



Ref	Part No	Description	Qty
2	343397790	Push button	1
3	342003390	Pressure spring	1
4	341005830	Guide bush	1
5	316045500	Gear housing cpl.	1
6	341515430	Bolt	1
7	341100660	Self locking nut	1
8	316045530	Bevel gear	1
9	141123870	Washer	1
10	143115230	Ball bearing, 12x37x12	1
11	339007280	Fixed bearing cover	1
12	316045560	Fan w. dust guard	1
13	310009490	Armature compl.,120V	1
14	343390630	Sealing washer	1
15	143113400	Ball bearing, 8x22x7	1
16	344094080	Rubber bearing	1
17	339151130	Baffle	1
18	141121680	Self-tap. fill. h. screw	2
19	311009590	Field coil	1
20	344494200	Strand	1
21	141119370	Self-tap. fill. h. screw	4
22	141122020	Fillister head screw	1
23	141119850	Fillister head screw	1
24	339011810	Gasket	3
25	316045550	Gear flange cpl.	1
26	141121640	Fill. head screw(DIN 7985)	4
27	141123890	Fillister head screw,(DIN 7985)	1
28	316045360	protective hood adjustment	1
29	141181500	Circlip	1
30	341604100	Spindle,5/8"	1
34	341702050	Screw	2
35	343395530	Brush holder cover	2
36	316046780	Carbon brush set,120 V	1
37	343000950	Brush guide	2
38	141116020	Self-tap. fill. h. screw	8
39	343395510	Handle (upper+under part)	1
40	339007320	Retaining sheet	1
41	343398250	Edge protection	1
42	343409150	Switch,230V/120V	1
43	339127730	Cable clip	1
44	344094550	Cable sleeve	1
45	344490920	Cable with plug	1
47	315013300	Motor housing	1
48	338049270	Rating plate	1
49	343397490	Damper	1
50	343395520	Locking lever	1
51	342002170	Pressure spring	1
52	343397890	Dummy plug	1
53	141116800	Self-tap. fill. h. screw	1
54	339160850	Contact strap	2
55	344498080	Strand compl.,120V	1
56	338122090	Warning Label 52x22	1