



SPEEDAIRE



**1/2" INDUSTRIAL
DUTY AIR RATCHET**

Model 45YY13

®

SPEEDAIR

MAINTENANCE / REPAIR
ASSEMBLY / INSTALLATION
SAFETY / SPECIFICATIONS
GETTING STARTED OPERATION

TROUBLESHOOTING

Maintenance / Repair
Assembly / Installation
Safety / Specifications
Getting Started Operation

**PLEASE READ AND SAVE
THESE INSTRUCTIONS.**

**READ CAREFULLY
BEFORE ATTEMPTING
TO ASSEMBLE, INSTALL,
OPERATE OR MAINTAIN THE
PRODUCT DESCRIBED.**

**PROTECT YOURSELF AND
OTHERS BY OBSERVING ALL
SAFETY INFORMATION. FAILURE
TO COMPLY WITH INSTRUCTIONS
COULD RESULT IN PERSONAL
INJURY AND/OR PROPERTY
DAMAGE! RETAIN INSTRUCTIONS
FOR FUTURE REFERENCE.**

**PLEASE REFER TO BACK COVER
FOR INFORMATION REGARDING
DAYTON'S WARRANTY AND OTHER
IMPORTANT INFORMATION.**

Model #: _____

Serial #: _____

Purch. Date: _____



1/2" Industrial Duty Air Ratchet

45YY13

Owner's Manual

Model	Free Speed (RPM)	Square Drive Size	Max. Torque	Air Inlet (NPT)	Hose Size (Inch)	Average CFM @ 15-sec Run Time	Length (Inch)	Weight (Lbs)
45YY13	200	1/2"	70 ft-lb	1/4"	3/8"	4	11.5	3.2

OPERATING INSTRUCTIONS

- REVIEW THIS ENTIRE MANUAL BEFORE OPERATING YOUR AIR TOOL.**
- BEFORE MOUNTING ACCESSORIES** and before placing tool in service, check the free running spindle speed with 90 PSI at the tool inlet. Periodically check the tool's free speed.
- ALWAYS WEAR APPROVED EYE PROTECTION.** Use a dust mask if the operation creates dust.
- PROTECT YOURSELF FROM NOISE.** Noise levels vary with work surface. If noise level is high, wear ear protectors.
- WEAR GLOVES AND PROTECTIVE CLOTHING** to avoid injuries caused by chips or pieces, malfunctioning attachments, or improperly clamped work.
- NEVER USE THIS AIR TOOL AT AIR PRESSURE ABOVE 90 PSI AT TOOL INLET.** **THIS IS AN UNGOVERNED TOOL AND ITS FREE SPEED WILL INCREASE IN PROPORTION TO ANY INCREASE IN AIR PRESSURE ABOVE 90 PSI.** Control air pressure with a reliable automatic air regulator. Periodically monitor air pressure at tool's air inlet while tool is running free speed.
- USE ONLY ACCESSORIES** with R.P.M. (speed) rating **AT** or **ABOVE** the **ACTUAL** free speed of the air tool. **THE RATED FREE RUNNING SPEED OF THIS TOOL** is 200 R.P.M.
- DISCONNECT TOOL FROM AIR SUPPLY BEFORE CHANGING OR INSPECTING ACCESSORIES.** Do not perform service work on tool while connected to an air supply.
- IF A SUDDEN CHANGE OCCURS** in the feel (vibration level) or sound (pitch) of the unit, the tool should be **IMMEDIATELY TURNED OFF** and the work head inspected for damage. Do not use cracked or chipped wheels, discs, wire brushes, mounted stones, etc.
- HANDLE THE TOOL SAFELY.** Do not carry the tool with a finger on or near the throttle while the tool is connected to an air supply. Do not carry the die grinder by the hose. Protect the hose from heat and sharp objects.
- WHEN NOT IN USE, DISCONNECT TOOL FROM AIR SUPPLY** to prevent accidental or unauthorized use in the absence of the operator.
- KEEP VISITORS AT A SAFE DISTANCE** and out of line with the tool's work head and work surface.



1/2" Industrial Duty Air Ratchet

**SAFETY /
SPECIFICATIONS**

! WARNING

Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code of Portable Air Tools (ANSI B186.1) and any other applicable safety code and regulations.

Always wear impact-resistant eye and face protection when operating or performing maintenance on the tool. Always wear hearing protection when using this tool. High sound levels can cause permanent hearing loss. Use hearing protection as recommended by your employer or OSHA regulation.

Unpacking

When unpacking the unit, carefully look for any damage that may have occurred during transit. Check for loose, missing or damaged parts.

General Safety Information

1. For Additional Safety Information Consult:

Your employer, union, and/or trade association. US Department of Labor (OSHA): www.osha.gov, "Safety Code For Portable Air Tools" (B186.1)

2. Entanglement Hazards

Keep away from rotating spindle and accessory.
Do not wear jewelry or loose clothing. Scalping can occur if hair is not kept away from the tool and accessories. Choking can occur if neckwear is not kept away from tool and accessories.

3. Workplace Hazards

Slip/Trip/Fall is a major cause of serious injury or death. Beware of excess hose left on the walking or work surface.

High sound levels can cause permanent hearing loss. Use hearing

protection as recommended by your employer or OSHA regulation (see 29 CFR part 1910).

Maintain a balanced body position and secure footing. Repetitive work motions, awkward positions and exposure to vibration can be harmful to hands and arms. If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician. Avoid inhaling dust or handling debris from the work process which can be harmful to your health. Use dust extraction and wear respiratory protective equipment when working with materials which produce airborne particles. This tool is not intended for use in explosive atmospheres and is not insulated for contact with electric power sources. Potentially explosive atmospheres can be caused by dust and fumes resulting from sanding or grinding. Use dust extraction or suppression system which is suitable for the material being processed. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to

cause cancer and birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead based paints
- Crystalline silica bricks and cement and other masonry products
- And Arsenic and chromium from chemically-treated rubber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles. For professional use only.



Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- . Lead from Lead-based paints
- . Crystalline silica from bricks and cement and other masonry products, and
- . Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals : work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



1/2" Industrial Duty Air Ratchet

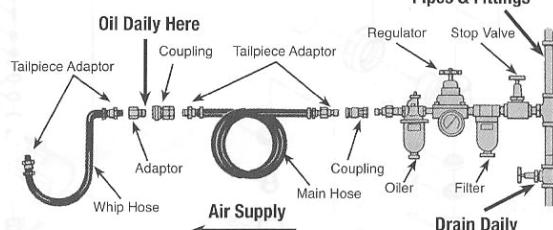
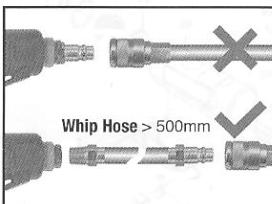
Piping System

Air mains and lines should be large enough to avoid excessive pressure loss under conditions of maximum flow.

In air lines, as in aftercoolers, water is continually precipitated as the air cools. For this reason pipe lines should be provided with a means of draining or trapping this water before it reaches the hose outlets.

It is advisable to pitch the mains in the direction of air flow so that both gravity and air flow will carry the water to traps or water legs located at frequent intervals. These should be drained regularly and never allowed to become full and inoperative. Use of automatic traps will eliminate manual draining and the possibility of traps becoming full.

However traps which drain to sewers can waste a considerable amount of air unless regularly inspected and kept in good working order.



**ASSEMBLY /
INSTALLATION**

Air Regulators

Clean, dry, lubricated air at the proper pressure is the most important requirement for proper operation of air tools. Speedaire® tools are designed to operate at 90 PSI unless otherwise specified.

Installation

On installations where the piping system does not provide clean, dry air, the use of filters at hose connection points is recommended. A good filter, kept properly drained, will remove nearly all entrained water whereas a poor one is practically useless. Most filters do not have adequate water storage capacity and, unless provided with an auxiliary storage receiver or automatic trap, soon cease to function.

Operation

- Supply tool with 90PSI of clean, dry air. Higher pressure drastically reduces tool life. Connect tool to air line using pipe, hose, and fitting sizes. Do not install a quick coupler directly into the grinder throttle handle.
- Use only mounted wheels or tire buffering accessories with adequate speed rating and the correct shaft diameter. Grinding accessory's rated speed must be equal to or greater than the speed of the die grinder.

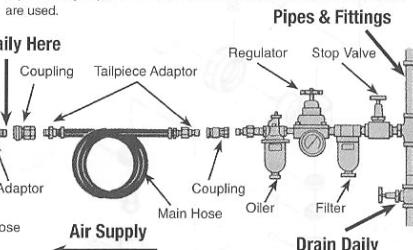
Provision for quick and positive inspection of operation and for leakage should be made when traps are installed.

Three-way cocks or stop and waste cocks in the drains are usually provided for this purpose.

To aid in preventing condensed moisture from reaching the tools, down pipes or hose connections should never be taken directly from the bottom of air pipes or mains.

Connection should be made at the top of the main and a long radius return bend used.

Leaders, valves and hose connections should be large enough to pass the maximum amount of air required by the tool or tools on the line. This is particularly important if manifolds, from which several hose lines run, are used.



Lubrication

Use an air line lubricator with Mobil Almo 525 air tool oil (model 4ZF22), adjusted to two (2) drops per minute. If an air line lubricator cannot be used, add air motor oil to the inlet once a day.

Moisture Elimination

The amount of moisture carried by compressed air varies as the temperature of the air drops after compression. As the temperature drops, water is precipitated. In order to eliminate as much water as possible, compressors should be equipped with intercoolers, aftercoolers, and full size receivers. These should be kept drained and in good working condition.

Compressor Intake

Locate the intake to obtain the coolest, driest and cleanest air available. Intakes should be of ample size and as direct as possible. Avoid steam pipes, escaping steam and dusty or wet locations (as near roofs, floors, ground, etc...). When practical, take air from out-of-door on the north side of the building. Provide proper screening and protection. Intake filters of suitable size should be used.



½" Industrial Duty Air Ratchet

Troubleshooting

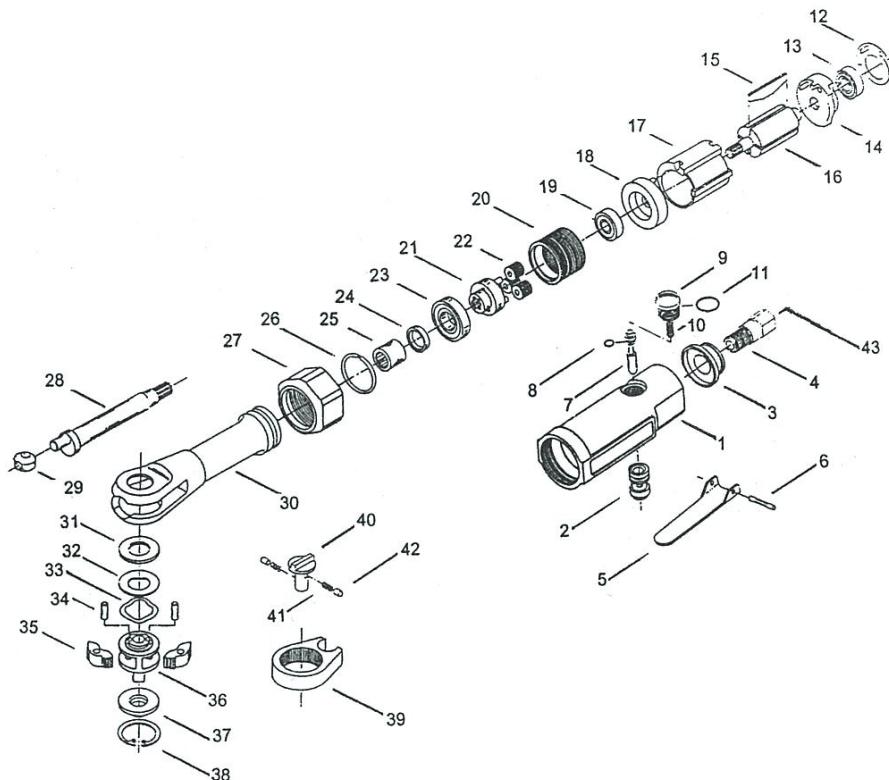
Problem	Possible Cause	Solution
There is moisture blowing out of the tool's exhaust.	There is water in the tank.	Drain the tank. (see the air compressor manual for instructions.) Lubricate the tool again and run for 1-2 seconds.
The tool runs slowly or will not operate.	There is grit or gum in the tool.	Flush the tool with air tool oil or gum solvent.
	The tool is out of oil.	Lubricate the tool according to the lubrication instructions in this manual.
	The air pressure is low.	<ul style="list-style-type: none"> ▲ Adjust the regulator setting on the tool. ▲ Adjust the compressor regulator to the tool's maximum setting of 90psi.
	The air hose leaks.	<ul style="list-style-type: none"> ▲ Check the fitting and connection; ▲ Check the air hose.
	The air pressure drops.	<ul style="list-style-type: none"> ▲ Ensure the hose is the proper size. Long hoses or tools using large volumes of air may require a hose with an I.D. of 1/2" or larger depending on the total length of the hose. ▲ Do not use a multiple number of hoses connected together with a quick connect fitting. This causes additional pressure drops and reduces the tool power. Directly connect the hoses together.
	There is a worn rotor blade in the motor.	Replace the rotor blade.
	There is a worn ball bearing in the motor.	Remove and inspect the bearing for rust, dirt, and grit. Replace or clean and grease the bearing with bearing grease.

TROUBLESHOOTING

1/2" Industrial Duty Air Ratchet

For Repair Parts, call 1-800-323-0620

45YY13



Parts List

Index No.	Part No.	Description	Index No.	Part No.	Description
1.	2001.2	Handle	21.	3132	Planet Carrier Assembly
2.	3002	Trigger Body	22.	3139	Idler Gear (3)
3.	7072	Exhaust Duct	23.	6046	Ball Bearing
4.	3016	Hose Adapter	24.	4013	Oil Seal
5.	8020	Throttle Lever	25.	6047	Needle Bearing
6.	5009	Groov-Pin	26.	6039	Retaining Ring
7.	3001	Trigger Stem	27.	3074	Locknut
8.	4005	O-Ring	28.	3082.2	Crankshaft
9.	7071	Valve Plug	29.	3083	Crank Follower
10.	6021	Spring	30.	3085.1	Ratchet Head
11.	4006	O-Ring	31.	3079	Thrust Bearing
12.	4001	Gasket	32.	8017.1	Friction Washer
13.	6003	Ball Bearing	33.	6059.1	Spring
14.	2006	Rear End Plate	34.	5035	Pivot Pin (2)
15.	4010	Vane (4)	35.	7002	Pawl (2)
16.	3009	Rotor	36.	3070	Anvil
17.	7050	Cylinder	37.	3077	Thrust Bearing
18.	7037	Front End Plate	38.	6007	Retaining Ring
19.	6008	Ball Bearing	39.	7011	Yoke
20.	3076.1	Internal Gear	40.	7013	Reverse Knob
			41.	6009	Actuator Spring (2)
			42.	3081	Pawl Actuator (2)
			43.	5030	Inlet Screen (not shown)

Maintenance /
Repair

SPEEDAIRE®



½" Industrial Duty Air Ratchet

SPEEDAIRE ONE-YEAR LIMITED WARRANTY

SPEEDAIRE ONE-YEAR LIMITED WARRANTY. All Speedaire® product models covered in this manual are warranted by Dayton Electric Mfg. Co. (Dayton) to the original user against defects in workmanship or materials under normal use for one year after date of purchase. If the Speedaire Product is part of a set, only the portion that is defective is subject to this warranty. Any product or part which is determined to be defective in material or workmanship and returned to an authorized service location, as Dayton or Dayton's designee designates, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced with a new or reconditioned product or part of equal utility or a full refund given, at Dayton's or Dayton's designee's option, at no charge. For limited warranty claim procedures, see **Warranty Service** below. This warranty is void if there is evidence of misuse, mis-repair, mis-installation, abuse or alteration. This warranty does not cover normal wear and tear of Speedaire Products or portions of them, or products or portions of them which are consumable in normal use. This limited warranty gives purchasers specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY RELATING TO ALL CUSTOMERS FOR ALL PRODUCTS

LIMITATION OF LIABILITY. TO THE EXTENT ALLOWABLE UNDER APPLICABLE LAW, DAYTON'S LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES IS EXPRESSLY DISCLAIMED. DAYTON'S LIABILITY IN ALL EVENTS IS LIMITED TO AND SHALL NOT EXCEED THE PURCHASE PRICE PAID.

WARRANTY DISCLAIMER. A DILIGENT EFFORT HAS BEEN MADE TO PROVIDE PRODUCT INFORMATION AND ILLUSTRATE THE SPEEDAIRE PRODUCTS IN THIS LITERATURE ACCURATELY; HOWEVER, SUCH INFORMATION AND ILLUSTRATIONS ARE FOR THE SOLE PURPOSE OF IDENTIFICATION, AND DO NOT EXPRESS OR IMPLY A WARRANTY THAT THE SPEEDAIRE PRODUCTS ARE MERCHANTABILITY, OR FIT FOR A PARTICULAR PURPOSE, OR THAT THE SPEEDAIRE PRODUCTS WILL NECESSARILY CONFORM TO THE ILLUSTRATIONS OR DESCRIPTIONS. EXCEPT AS PROVIDED BELOW, NO WARRANTY OR AFFIRMATION OF FACT, EXPRESSED OR IMPLIED, OTHER THAN AS STATED IN THE **LIMITED WARRANTY** ABOVE IS MADE OR AUTHORIZED BY DAYTON.

PRODUCT SUITABILITY. MANY JURISDICTIONS HAVE CODES AND REGULATIONS GOVERNING SALES, CONSTRUCTION, INSTALLATION, AND/OR USE OF PRODUCTS FOR CERTAIN PURPOSES, WHICH MAY VARY FROM THOSE IN NEIGHBORING AREAS. WHILE ATTEMPTS ARE MADE TO ASSURE THAT SPEEDAIRE PRODUCTS COMPLY WITH SUCH CODES, DAYTON CANNOT GUARANTEE COMPLIANCE, AND CANNOT BE RESPONSIBLE FOR HOW THE PRODUCT IS INSTALLED OR USED. BEFORE PURCHASE AND USE OF A PRODUCT, REVIEW THE SAFETY/SPECIFICATIONS, AND ALL APPLICABLE NATIONAL AND LOCAL CODES AND REGULATIONS, AND BE SURE THAT THE SPEEDAIRE PRODUCT, INSTALLATION, AND USE WILL COMPLY WITH THEM.

CONSUMERS ONLY. CERTAIN ASPECTS OF DISCLAIMERS ARE NOT APPLICABLE TO CONSUMER PRODUCTS SOLD TO CONSUMERS: (A) SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU; (B) ALSO, SOME JURISDICTIONS DO NOT ALLOW A LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU; AND (C) BY LAW, DURING THE PERIOD OF THIS LIMITED WARRANTY, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO CONSUMER PRODUCTS PURCHASED BY CONSUMERS, MAY NOT BE EXCLUDED OR OTHERWISE DISCLAIMED.

THIS LIMITED WARRANTY ONLY APPLIES TO SPEEDAIRE PRODUCTS PURCHASED BY UNITED STATES PURCHASERS FOR DELIVERY IN THE UNITED STATES.

WARRANTY SERVICE

To obtain warranty service if you purchased the covered product directly from W.W. Grainger, Inc. (Grainger), (i) write or call or visit the local Grainger branch from which the product was purchased or another Grainger branch near you (see www.grainger.com for a listing of Grainger branches); or (ii) contact Grainger by going to www.grainger.com and clicking on the **Contact Us** link at the top of the page, then clicking on the **Email us** link; or (iii) call Customer Care (toll free) at 1-888-361-8649. To obtain warranty service if you purchased the covered product from another distributor or retailer, (i) go to www.grainger.com for Warranty Service; (ii) write or call or visit a Grainger branch near you; or (iii) call Customer Care (toll free) at 1-888-361-8649. In any case, you will need to provide, to the extent available, the purchase date, the original invoice number, the stock number, a description of the defect and anything else specified in this Speedaire One-Year Limited Warranty. You may be required to send the product in for inspection at your cost. You can follow up on the progress of inspections and corrections in the same ways. Title and risk of loss pass to buyer on delivery to common carrier, so if product was damaged in transit to you, file claim with carrier, not the retailer, Grainger or Dayton. For warranty information for purchasers and/or delivery outside the United States, please contact:

Dayton Electric Mfg. Co.,

**100 Grainger Parkway, Lake Forest, IL 60045 U.S.A.
or call +1-888-361-8649**

Unidad de marketing y relaciones públicas de la Universidad de Zaragoza. Los resultados de este estudio se presentan en el informe finalizado en junio de 2010.

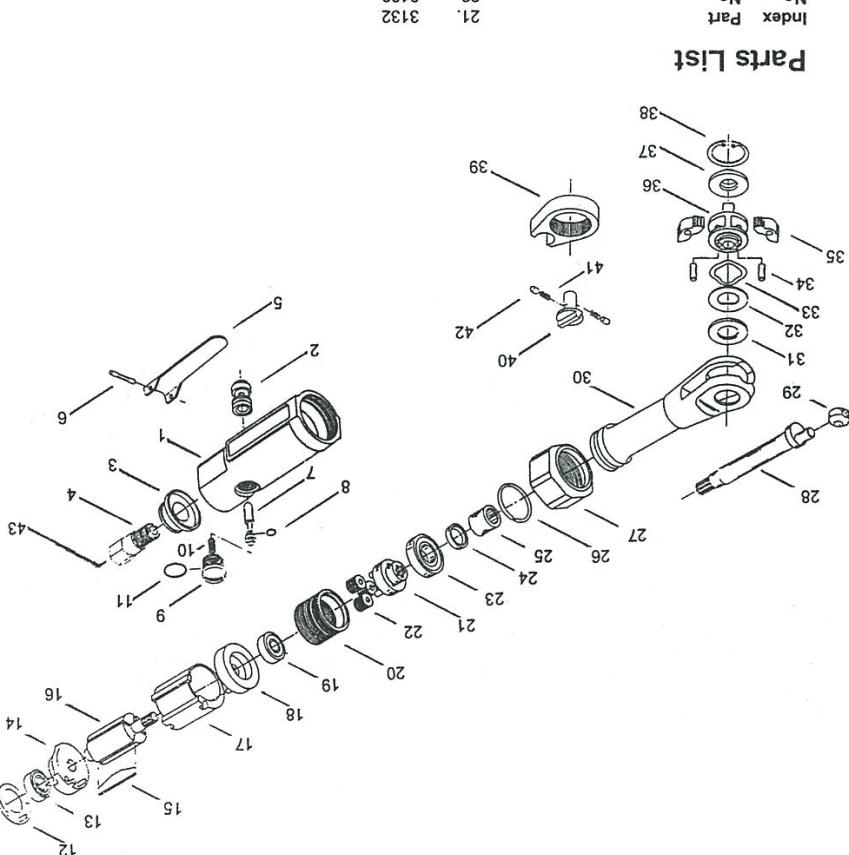
Consejos y recomendaciones técnicas. Renuncia. A pesar de que el plazo para renunciar a la compra es de 14 días hábiles, las empresas no tienen la obligación de aceptar la renuncia si ésta se realiza más tarde. La razón es que la venta ya ha sido realizada y la empresa tiene derecho a cobrar el precio acordado.

LIMITACION DE RESPONSABILIDAD. SEGUN LO QUE PERMITA LA LEY VIGENTE, DAVTON REUNIONES A QUALQUIER RESPONSABILIDAD POR DAÑOS INCIDENTALES O CONSECUENTES, LA RESPONSABILIDAD DE DAVTON EN TODOS LOS EVENTOS ESTA LIMITADA A NO MÁS DE LOS DÍAS 120 COMPRADORES DEBERÍAN LLEGAR A LOS CULSES VARIAN SEGUN LA JURISDICCIÓN.

LOS MODELOS DE LAS AFLIADORES DE BOQUILLA SPEEDRAE. CUBIERTO EN ESTE MANUAL ESTA GARANTIZADO POR DATYON ELECTRIC MFG. CO. (DATYON) AL USUARIO ORIGINAL CONTRA DEFECTOS DE FABRICACION O MATERIALES BAAU SO SU NORMAL DURANTE UN ANO A PARTIR DEL FECHA DE COMPRA. COMPLIAR CON LA INSTRUCCIONES DADA EN ESTE DETERMINAR DENTRO DE UNA MANO DE OBRA DEBE DESEVERSE A UN CENTRO DE SERVICIO AUTORIZADO. COMO SE DECIRÁ EN CASO DE DATYON LOS COSTOS DE ENVÍO DE REPARACIÓN EXCLUSIVO. SE REPARARA O REMPLAZARA DE ACUERDO A LA DECISIÓN DE DATYON PARA CONOCER LOS PROCEDIMIENTOS DE SOLICITUD DE LA GARANTIA CONSULTAR A DISOCIACION PROTOXA. PRESENTAR MAS DETALLE ESTA GARANTIA

GARANTIA LIMITADA

Industria! neumátiCo
1/2" llave de trinquete



Parts List

Index	Part No.	No.	
1.	20012	21.	3132
2.	3002	22.	3139
3.	7072	23.	6046
4.	3016	24.	4013
5.	8020	25.	6047
6.	5009	26.	6039
7.	3001	27.	3074
8.	4005	28.	30822
9.	7071	29.	3083
10.	6021	30.	30851
11.	4006	31.	3079
12.	4001	32.	80171
13.	6003	33.	60591
14.	2006	34.	5035
15.	4010	35.	7002
16.	3009	36.	3077
17.	7037	37.	7011
18.	7050	38.	6007
19.	6008	39.	7013
20.	30761	40.	6009
		41.	6009
		42.	418
		43.	5030

Problema	Causa posible	Solución
La herramienta no funciona.	Hay agua en la herramienta.	Hay clreta húmeda que sale del tubo de escape de la herramienta. Saque el agua en la llave. Consulte el manual de instrucciones del compresor de aire. Luego quite la herramienta con agua o solvente de resina para herramientas neumáticas.
La herramienta se estropeó.	Le faltó aceite a la herramienta.	Luego quite la herramienta de acuerdo a las instrucciones de lubricación de este manual.
La herramienta o no funciona.	Hay grasa en la herramienta.	Lave la herramienta con aceite o solvente de resina para herramientas neumáticas.
La solución de aire es baja.	Ajuste la configuración del regulador de la herramienta.	▼ Ajuste el regulador compresor con la especificación máxima de la herramienta de 90psi.
La maniobra de aire tiene fugas.	Compruebe los accesorios y la conexión.	▼ Compruebe la maniobra de aire.
La presión de aire ha descendido.	Aségúrese de que la maniobra tenga el tamaño apropiado. Las maniobras grandes o las herramientas que usan grandes volúmenes de aire pueden necesitar una cantidad total de la maniobra.	▼ Aségúrese de que la maniobra tenga el tamaño apropiado. Las maniobras grandes o las herramientas que usan grandes volúmenes de aire pueden necesitar una cantidad total de la maniobra.
La maniobra de aire es alta.	La presión de aire es alta.	La presión de aire es alta que causa la herramienta dañada.
Hay una cuchilla desgastada del rotor en el motor.	Reemplace la cuchilla del rotor.	Hay una cuchilla desgastada del rotor en el motor. Reemplace la cuchilla del rotor.
Hay un cojinete de bola en el motor.	Quite e inspeccione el cojinete para ver si hay óxido.	Hay un cojinete de bola en el motor. Quite e inspeccione el cojinete para ver si hay óxido.

Identificación y solución de problemas

1/2" Lave de trinquette industrial neumático

SPEEDAIRE®

1/2” Llave de trinquete industrial neumático

SPEEDAIRE

45YY13

Speedaire® Instrucciones operativas y manual de partes

<p>Introducción general de Seguridad</p> <p>1. Para obtener información de</p> <p>seguridad, consulte la sección correspondiente al apartado que</p> <p>aplica.</p> <p>2. Progresos de investigación</p> <p>2.1. Municípios alejados de los víaslagos o acaseros de sebelejo que se convierten en zonas de plantación para la extracción de la madera.</p> <p>2.2. Municípios alejados de los víaslagos o acaseros de sebelejo que se convierten en zonas de plantación para la extracción de la madera.</p> <p>3. Descripción de caceros</p> <p>Los caceros de la selva que se convierten en zonas de plantación para la extracción de la madera.</p> <p>4. Descripción de las autoridades locales</p> <p>Las autoridades locales que se convierten en zonas de plantación para la extracción de la madera.</p> <p>5. Descripción de las autoridades nacionales</p> <p>Las autoridades nacionales que se convierten en zonas de plantación para la extracción de la madera.</p> <p>6. Descripción de las autoridades internacionales</p> <p>Las autoridades internacionales que se convierten en zonas de plantación para la extracción de la madera.</p>
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El trabajo es una actividad que requiere de una gran dedicación y esfuerzo; para lograrlo se necesitan ciertas habilidades:

• Arsenico y cromo de maderas tratadas químicamente.

Ladrillos de silicio cristalino y cemento y otros productos de albañilería.

• Plomo de pinturas a base de plomo

База данных MySQL (часть 1-я)

Parte del polvo creado por la jifla, aserrado, esmerilados, perforaciones y otras actividades de construcción, contienen químicos considerados como causantes del cáncer malolamazos conmuta las actividades perjudiciales. Algunas fármacos de los químicos son:



<p>Introducción general de Seguridad</p> <p>1. Para obtener información de</p> <p>seguridad, consulte la sección correspondiente al apartado que</p> <p>aplica.</p> <p>2. Progresos de investigación</p> <p>2.1. Municípios alejados de los víaslagos o acaseros de sebelejo que se convierten en zonas de desarrollo rural</p> <p>que se convierten en zonas de mantenimiento y desarrollo rural</p> <p>2.2. Municípios alejados de los víaslagos o acaseros de hermanamiento y acaseros de pueblo preexistente que se convierten en zonas de desarrollo rural</p> <p>3. Desarrollo de cesteros</p> <p>3.1. Los deslizamientos/tormentas/casales son las causas más comunes de deslizamientos/tormentas/casales que se producen en el sistema de extracción de agua sea dulce o salobre.</p> <p>3.2. Los víaslagos que se convierten en zonas de desarrollo rural</p> <p>que se convierten en zonas de desarrollo rural</p> <p>3.3. Los víaslagos que se convierten en zonas de desarrollo rural</p> <p>que se convierten en zonas de desarrollo rural</p>

45YY13	Velocidad (RPM)	Yunque cuadrado (pulgadas)	Maximo de torsion (pulgadas)	Conducto de mangueara (pulgadas) @ 15 segundos	Dimensioes de la mangueara (pulgadas)	PCM promedio de operar	Tamano de estrecho entreda de operar	Tamano de estrecho entreda de operar	Velocidad (RPM)	Peso (lbs)
45YY13	200	1/2"	70 pie libra	1/4"	3/8"	4	11.5	3.2	45YY13	200

Manual de instrucción

45YY13 Industrial neumático 1/2" Llave de trinquete

SPEEDAIRE

1. LEER ESTRE MANUAL COMPLETAMENTE ANTES DE OPERAR ESTA AMOLADORA NEUMATICA.
2. ANTES DE INSTALAR LOS ACCESORIOS Y ANTES DE USAR ESTA HERRAMIENTA neumática, revise de la velocidad de giro en vacío usando una presión de aire útil de 6,2 bar (90 psi). La velocidad de giro normal a esta presión es de 200 rpm. Verifique esta velocidad cada cinco minutos.
3. SEMPRE USE PROTECCION PARA LOS OJOS. También use mascarilla filtro anti polvo.
4. PROTEJASE CONTRA EL RUIDO. Los niveles de ruido dependen de los materiales molados. Use protección auditiva.
5. USE GUANTES Y ROPA DE PROTECCION PERSONAL para prevenir posibles lesiones causadas por fragmentos sueltos, mal funcionamiento de accesorios o materiales mal fijados.
6. NUNCA USE ESTA AMOLADORA NEUMATICA A PRESIONES DE SUMINISTRO DE AIRE QUE EXCEDAN 6,2 bar (90 psi). ESTA HERRAMIENTA NO CUENTA CON REGULADOR DE PRESIONES DE AIRE SOBRE 6,2 bar (90 psi). Regule el aire suministrado con un regulador de presión neumático. Revise la presión de aire a la herramienta mientras esté funcionando en vacío.
7. USE SOLO ACCESORIOS con velocidades de giro admisibles IGUALES o MAYORES a las indicadas para esta amoladora. LA VELOCIDAD DE LA TOMA DE AIRE ANTES DE REVISAR O CAMBIAR ACCESORIOS. No realice mantenimiento a la herramienta mientras esté conectada a la toma de aire.
8. DESCONECTE LA HERRAMIENTA DE LA TOMA DE AIRE ANTES DE REVISAR O CAMBIAR ACCESORIOS. No realice mantenimiento a la herramienta mientras esté conectada a la toma de aire.
9. SI OCURRE ALGUN CAMBIO INESPERADO en cómo se siente la vibración o el sonido de la amoladora. APAGUE LA HERRAMIENTA INMEDIATAMENTE y revise la vibración o el sonido de alambre al que daña. No use llaves dañadas, desgastadas o fisiadas, más de los cepillos de alambre dañados.
10. UTILIZE LA HERRAMIENTA EN FORMA SEGURA. No transporta la herramienta con un fijoas o rotas, etc.
11. CUANDO ESTÉ FUERA DE USO, DESCONECTE DE LA TOMA DE AIRE para prevenir accidentes o uso accidental.
12. MANTENGA ALIJADOS DE SU PUESTO DE TRABAJO A ESPECTADORES Y VISITANTES y fuera del área de posible contacto.

MANTENIMIENTO /
REPARACION

IDENTIFICACION
DE PROBLEMAS

INSTALACION

SEGURIDAD /
ESPECIFICACIONES

PARA COMENZAR
OPERACION

POR FAVOR, LEA Y GUARDE
ESTAS INSTRUCCIONES. LEALAS
CUIDADOSAMENTE ANTES DE
TRATAR DE MONTAR, INSTALAR,
OPERAR O DAR MANTENIMIENTO
A LOS DEMAS OBSERVANDO
PROTEJASE USTED MISMO Y
TODA LA INFRASTRUCTURA
SEGURIDAD. EL NO CUMPLIR
CON LAS INSTRUCCIONES
PUDE OCASIONAR DANOS,
TANTO PERSONALES COMO
A LA PROPRIEDAD GUARDE
ESTAS INSTRUCCIONES PARA
LA INFORMACION DE
GARANTIA DE DAYTON Y OTRA
INFORMACION IMPORTANTE.

Núm. de Modelo: _____
Núm. de Serie: _____
Fecha de Compra: _____
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SPEEDAIRE



Modelo 45YY13
NEUMÁTICO
TRINQUETE INDUSTRIAL
 $\frac{1}{2}$ " LLAVE DE



SPEEDAIRE



ES

Manual de Instrucciones de Operación y Lista de Partes