

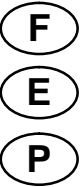
TPD1474

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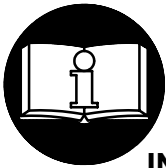
OPERATION AND MAINTENANCE MANUAL FOR SERIES DB/DT 10 IRGOPIC (UTILITY AIR DEMOLITION TOOL)

NOTICE

Series DB/DT 10 IRGOPICS are designed for general purpose breaking in construction, restoration and demolition applications. A wide range of accessories for use in breaking and removing concrete from reinforcement bars.

Ingersoll-Rand is not responsible for customer modification of tools for applications on which Ingersoll-Rand was not consulted.

⚠ WARNING



**IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING TOOL.
IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE
INFORMATION IN THIS MANUAL INTO THE HANDS OF THE OPERATOR.**

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

PLACING TOOL IN SERVICE

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code for Portable Air Tools (ANSI B186.1).
- For safety, top performance, and maximum durability of parts, operate this tool at 90 psig (6.2 bar/620 kPa) maximum air pressure at the inlet with 1/2" (13 mm) inside diameter air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. TPD905-1 for a typical piping arrangement.
- Always use clean, dry air at 90 psig (6.2 bar/620 kPa) maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.

USING THE TOOL

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Keep hands, loose clothing and long hair away from rotating end of tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Keep body stance balanced and firm. Do not overreach when operating this tool. High reaction torques can occur at or below the recommended air pressure.
- Tool accessories may continue to impact briefly after throttle is released.
- Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Use accessories recommended by Ingersoll-Rand.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance, and increased maintenance, and may invalidate all warranties.

Repairs should be made only by authorized trained personnel. Consult your nearest Ingersoll-Rand Authorized Servicenter.

Refer All Communications to the Nearest Ingersoll-Rand Office or Distributor.

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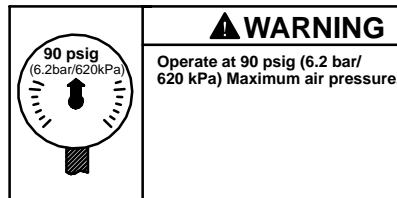
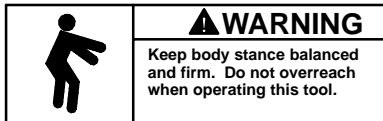
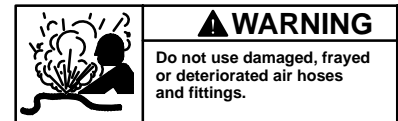
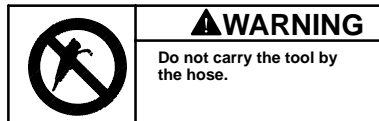
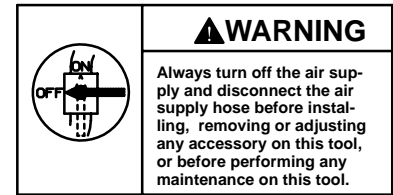
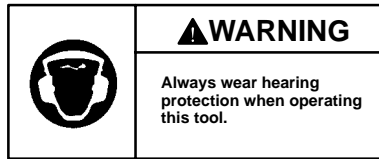
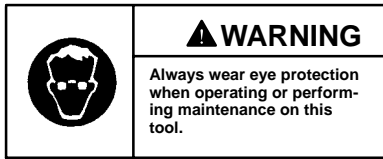
INGERSOLL-RAND®

PROFESSIONAL TOOLS

WARNING LABEL IDENTIFICATION

⚠ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.



IRGOPIC SPECIFIC WARNINGS

- When wearing gloves and operating models with inside trigger, always be sure that the gloves will not prevent the trigger from being released.
- Wear safety shoes, hard hat, safety goggles, gloves, dustmask and any other appropriate protective clothing while operating the tool.
- Do not indulge in horseplay. Distraction can cause accidents.
- Keep hands and fingers away from the throttle lever until it is time to operate the tool.
- Never rest the tool or chisel on your foot.
- Never point the tool at anyone.
- Compressed air is dangerous. Never point an air hose at yourself or co-workers.
- Never blow clothes free of dust with compressed air.
- Be sure all hose connections are tight. A loose hose not only leaks but can come completely off the tool and while whipping under pressure, can injure the operator and others in the area. Attach safety cables to all hoses to prevent injury in case a hose is accidentally broken.
- Never disconnect a pressurized air hose. Always turn off the air supply and bleed the tool before disconnecting a hose.
- The operator must keep limbs and body clear of the chisel. If a chisel breaks, the tool with the broken chisel projecting from the tool will suddenly surge forward.
- Do not ride the tool with one leg over the handle. Injury can result if the chisel breaks while riding the tool.
- Know what is underneath the material being worked. Be alert for hidden water, gas, sewer, telephone or electric lines.
- Use only proper cleaning solvents to clean parts. Use only cleaning solvents which meet current safety and health standards. Use cleaning solvents in a well ventilated area.
- Do not flush the tool or clean any parts with diesel fuel. Diesel fuel residue will ignite in the tool when the tool is operated, causing damage to internal parts. When using models with outside triggers or throttle levers, take care when setting the tool down to prevent accidental operation.
- Do not operate the tool with broken or damaged parts.
- Never start the tool when it is lying on the ground.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

PLACING TOOL IN SERVICE

LUBRICATION



Ingersoll-Rand No. 10

Always use an air line lubricator with these tools.

We recommend the following

Filter-Lubricator-Regulator Unit:

USA – No. 16LUB16

Attach the lubricator as close to the tool as practical.

After each two or three hours of operation and at the beginning of each work shift, if an air line lubricator is not used, disconnect the air hose and pour about 3 cc of oil into the air inlet of the tool.

Before storing the tool or if the tool is to be idle for a period exceeding twenty-four hours, pour about 3 cc of oil into the air inlet and operate the tool for 5 seconds to coat the internal parts with oil.

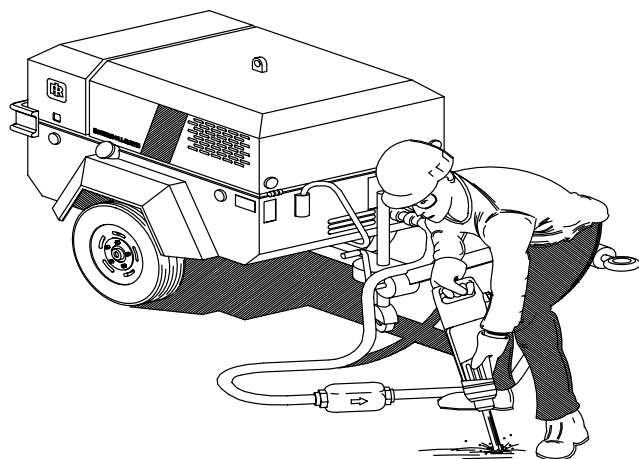
INSTALLATION

Air Supply and Connections

Always use clean, dry air. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool. An air line filter can greatly increase the life of an air tool. The filter removes dust and moisture.

Make sure all hoses and fittings are the correct size and are tightly secured. See diagram below for a typical piping arrangement.

The tool is shipped from the factory with a standard 3/4 NPT male inlet thread.



(Dwg. TPD1518)

OPERATION

Accessory Installation

⚠ WARNING

Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool or before performing any maintenance on this tool. Failure to do so could result in injury.

For Screw-on type Retainer No. DT9-22:

1. Grasp the Retainer and unscrew from the Barrel.
2. Insert the accessory through the Retainer Assembly and install it on the tool. Screw the Retainer onto the barrel until you feel the Retainer O-ring drop into the groove in the Retainer.

For Hitch Cutter Type Retainer No. DT9-273:

1. Retract Guard to reveal accessory hole in Retainer (67).
2. Grasp the Retainer and unscrew from the Barrel.
3. Insert the shank portion of the accessory through the cutout in the side of the Hitchcutter. Screw the Retainer onto the Barrel until you feel the Retainer O-ring drop into the groove in the Retainer.

For Latch Type Retainer No. DT9-240 and DT9-340:

1. Operate the Latch until it is 90 degrees to the body of the tool and clicks into position.
2. Insert the accessory into the tool until the collar of the accessory is past the Latch.
3. Operate the Latch until it is parallel to the tool and it clicks into position.

OPERATING THE TOOL

1. Hold the Handle (and front of tool if working horizontally) and press the point of the chisel firmly into the workpiece.
2. Use a steady and well-balanced stance and squeeze the Trigger.
3. Power is increased by depressing the Trigger.
4. Experience will indicate the correct amount of pressure to the tool. Normally, the amount of pressure is correct when the tool hits rhythmically, is comfortable to hold and works efficiently.

PLACING TOOL IN SERVICE

CAUTION

Compressed air is dangerous. When blowing the line clear of dirt, wear eye protection and keep the air line directed toward a safe, clear area.

5. Always blow out the air line before using to clear the line of dirt.

NOTICE

Do not repair the tool at the work site. Always take the tool to a repair shop. Never drag the tool on the ground. The air port and other openings will become clogged with dirt and debris.

CAUTION

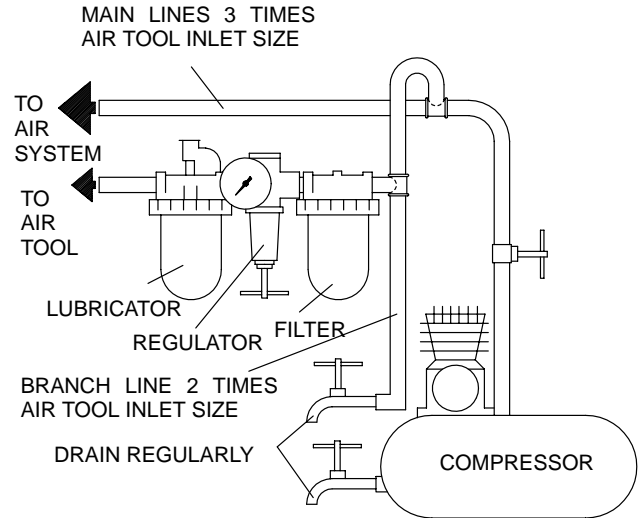
Do not operate the tool unless the chisel is against the work since this will cause premature wear of parts and reduce the vibration isolation properties of the tool.

6. Always break material to the point of “give.” Cracking does not result in a complete break. Clear away rubble as it is broken since uncleared rubble blocks the point of “give.”
7. Always take the right size “bite” with the tool. When working new material, experiment to find the right size “bite” required for breaking that material efficiently.

NOTICE

If “bites” are too big, the operator will try to pry with the tool. This could break the chisel. The tool is designed for demolition, not prying. Always use a pick for prying. If “bites” are too small, the operator will be working too slowly.

8. If the chisel or accessory should become stuck, do not use excessive force or mechanical means on the tool to pull out the chisel. Doing so will damage the vibration isolation unit. Break out the stuck chisel with a spare chisel or tool.



(Dwg. TPD905-1)

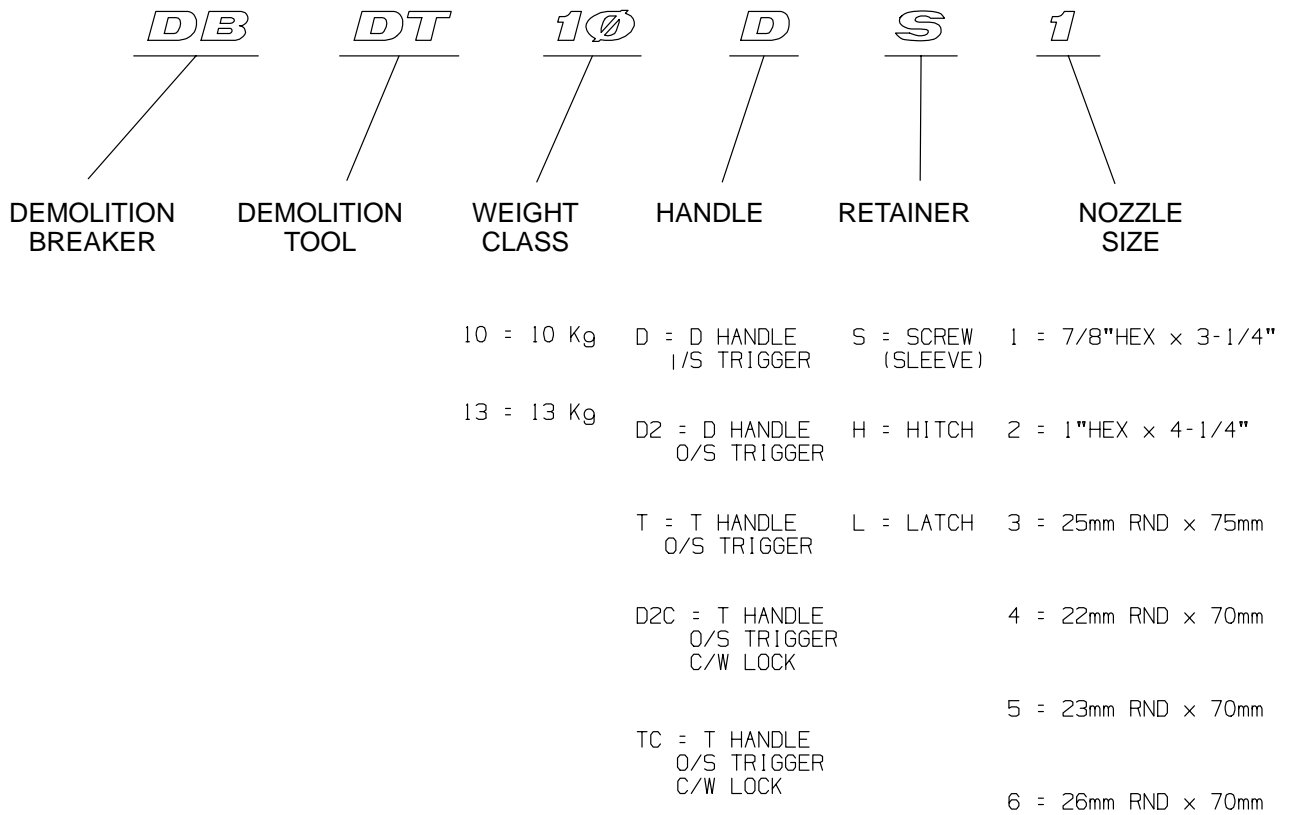
SPECIFICATIONS

SERIES DB/DT

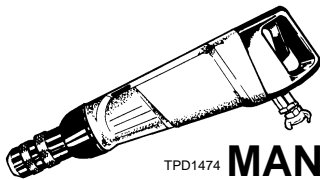
Blows per minute	1560
Piston Stroke	150 mm
Piston Bore	42.5 mm
Vibration Level Weighted RMS Acceleration ISO 8662 Part 5	6-7m/s ²
Noise Level EC Directive 84/537/EEC	<108LWA Sound Power
Noise Level EC Directive 89/392/EEC	100dB (A) Sound Pressure

PLACING TOOL IN SERVICE

IRGOPIC DEMOLITION TOOLS MODEL CODING



(Dwg. TPD1689)



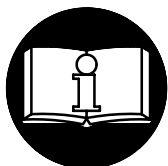
TPD1474

MANUEL D'EXPLOITATION ET D'ENTRETIEN DE LA SÉRIE DB/DT 10 IRGOPIC (OUTIL DE DEMOLITION PNEUMATIQUE)

NOTE

Les outils de démolition de la Série DB/DT 10 IRGOPIC sont destinés aux travaux généraux de cassure pour les applications de construction, de restauration et de démolition. Une gamme étendue d'accessoires est disponible pour la cassure et l'enlèvement du béton autour des barres d'armature. Ingersoll-Rand ne peut être tenu responsable de la modification des outils par le client pour les adapter à des applications qui n'ont pas été approuvées par Ingersoll-Rand.

⚠ ATTENTION



**D'IMPORTANTES INFORMATIONS DE SÉCURITÉ SONT JOINTES.
LIRE CE MANUEL AVANT D'UTILISER L'OUTIL.
L'EMPLOYEUR EST TENU DE COMMUNIQUER LES INFORMATIONS
DE CE MANUEL AUX EMPLOYÉS UTILISANT CET OUTIL.**

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

MISE EN SERVICE DE L'OUTIL

- Toujours exploiter, inspecter et entretenir cet outil conformément au Code de sécurité des outils pneumatiques portatifs de l'American National Standards Institute (ANSI B186.1).
- Pour la sécurité, les performances optimales et la durabilité maximale des pièces, cet outil doit être connecté à une alimentation d'air comprimé de 6,2 bar (620 kPa) maximum à l'entrée, avec un flexible de 13 mm de diamètre intérieur.
- Couper toujours l'alimentation d'air comprimé et débrancher le flexible d'alimentation avant d'installer, déposer ou ajuster tout accessoire sur cet outil, ou d'entreprendre une opération d'entretien quelconque sur l'outil.
- Ne pas utiliser des flexibles ou des raccords endommagés, effilochés ou détériorés.
- S'assurer que tous les flexibles et les raccords sont correctement dimensionnés et bien serrés. Voir Plan TPD905-1 pour un exemple type d'agencement des tuyauteries.
- Utiliser toujours de l'air sec et propre à une pression maximum de 6,2 bar (620 kPa). La poussière, les fumées corrosives et/ou une humidité excessive peuvent endommager le moteur d'un outil pneumatique.
- Ne jamais lubrifier les outils avec des liquides inflammables ou volatils tels que le kérosène, le gasoil ou le carburant d'aviation.
- Ne retirer aucune étiquette. Remplacer toute étiquette endommagée.

UTILISATION DE L'OUTIL

- Porter toujours des lunettes de protection pendant l'utilisation et l'entretien de cet outil.
- Porter toujours une protection acoustique pendant l'utilisation de cet outil.
- Tenir les mains, les vêtements fous et les cheveux longs, éloignés de l'extrémité rotative de l'outil.
- Prévoir, et ne pas oublier, que tout outil motorisé est susceptible d'à-coups brusques lors de sa mise en marche et pendant son utilisation.
- Garder une position équilibrée et ferme. Ne pas se pencher trop en avant pendant l'utilisation de cet outil. Des couples de réaction élevés peuvent se produire à, ou en dessous, de la pression d'air recommandée.
- La percussion des accessoires de l'outil peut continuer pendant un certain temps après le relâchement de la gâchette.
- Les outils pneumatiques peuvent vibrer pendant l'exploitation. Les vibrations, les mouvements répétitifs et les positions inconfortables peuvent causer des douleurs dans les mains et les bras. N'utiliser plus d'outils en cas d'inconfort, de picotements ou de douleurs. Consulter un médecin avant de recommencer à utiliser l'outil.
- Utiliser les accessoires recommandés par Ingersoll-Rand.
- Cet outil n'est pas conçu pour fonctionner dans des atmosphères explosives.
- Cet outil n'est pas isolé contre les chocs électriques.

NOTE

L'utilisation de rechanges autres que les pièces d'origine Ingersoll-Rand peut causer des risques d'insécurité, réduire les performances de l'outil et augmenter l'entretien, et peut annuler toutes les garanties.

Les réparations ne doivent être effectuées que par des réparateurs qualifiés autorisés. Consultez votre Centre de Service Ingersoll-Rand le plus proche.

Adressez toutes vos communications au Bureau Ingersoll-Rand ou distributeur le plus proche.

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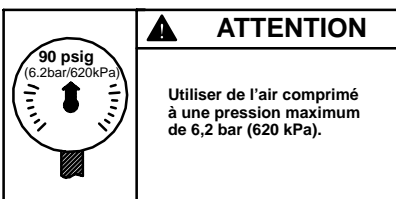
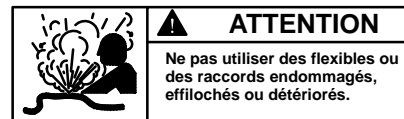
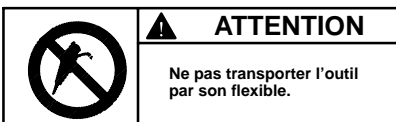
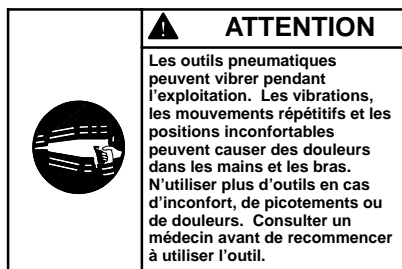
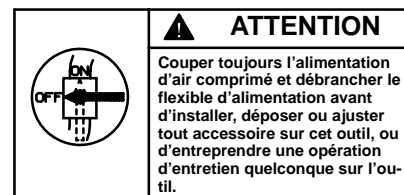
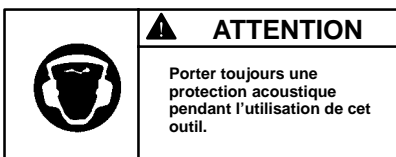
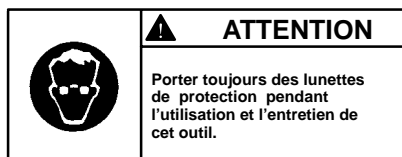
Imprimé aux É.U.

INGERSOLL-RAND®
PROFESSIONAL TOOLS

SIGNIFICATION DES ÉTIQUETTES D'AVERTISSEMENT

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.



MISE EN GARDE SPÉCIFIQUES À L'OUTIL IRGOPIC

- Lorsque vous portez des gants et que vous utilisez un outil à gâchette intérieure, vérifiez toujours que les gants n'empêcheront pas le relâchement de la gâchette.
- Lorsque vous utilisez cet outil, portez des chaussures de sécurité, un casque, des lunettes de sécurité, des gants, un masque et tout autre vêtement de protection approprié.
- Ne jouez pas avec l'outil. Toute distraction peut causer un accident.
- Tenez vos mains et vos doigts éloignés du levier de commande lorsque vous n'utilisez pas l'outil.
- Ne posez jamais l'outil sur les pieds.
- Ne pointez jamais l'outil vers quelqu'un.
- L'air comprimé est dangereux. Ne pointez jamais un flexible d'air comprimé sur vous ou vos collègues.
- Ne nettoyez jamais la poussière de vos vêtements avec un jet d'air comprimé.
- Vérifiez le serrage de toutes les connexions d'air comprimé. Un flexible desserré peut non seulement fuir mais aussi se détacher complètement de l'outil et l'effet de fouet causé par la pression peut blesser l'opérateur ou d'autres personnes à proximité. Attacher des câbles de sécurité sur le flexible pour empêcher toute blessure au cas où le flexible serait accidentellement coupé.
- Ne débranchez jamais un flexible sous pression. Coupez toujours l'alimentation d'air comprimé et purgez l'outil avant de débrancher un flexible.
- Tenez vos bras et vos jambes éloignés du burin. En cas de rupture du burin, l'outil et le reste du burin seront violemment projetés vers l'avant.
- Ne montez jamais sur l'outil avec une jambe par dessus la poignée. La rupture du burin pourrait vous blesser.
- N'oubliez pas que des dangers peuvent se trouver sous la surface où vous travaillez. Prenez soin de ne pas couper des tuyaux d'eau, de gaz ou d'égout, des câbles électriques ou de téléphone.
- N'utilisez que des solvants de nettoyage appropriés pour nettoyer les pièces. Utilisez seulement les solvants répondant aux réglementations de santé et de sécurité en vigueur, et dans une zone bien aérée.
- Ne rincez jamais l'outil ou les pièces dans du gazole. Les résidus de gazole pourraient s'enflammer dans l'outil lors de sa mise en marche et causer l'endommagement des pièces internes. Lorsque vous utilisez des modèles à gâchette extérieure ou à levier de commande, posez soigneusement l'outil pour empêcher toute mise en marche accidentelle.
- N'utilisez jamais un outil ayant des pièces cassées ou endommagées.
- Ne mettez jamais l'outil en marche lorsqu'il est posé au sol.
- Cet outil n'est pas conçu pour fonctionner dans des atmosphères explosives.
- Cet outil n'est pas isolé contre les chocs électriques.

MISE EN SERVICE DE L'OUTIL

LUBRIFICATION



Ingersoll-Rand No. 10

Utiliser toujours un lubrificateur avec ces outils. Nous recommandons l'emploi du filtre-régulateur-lubrificateur suivant:

USA – No. 16LUB16

Connecter le lubrificateur aussi près que possible de l'outil.

Toutes les deux ou trois heures de fonctionnement, et au début de chaque session de travail, si un lubrificateur de ligne n'est pas utilisé, débrancher le flexible d'alimentation et verser environ 3 cm³ d'huile dans le raccord d'admission de l'outil.

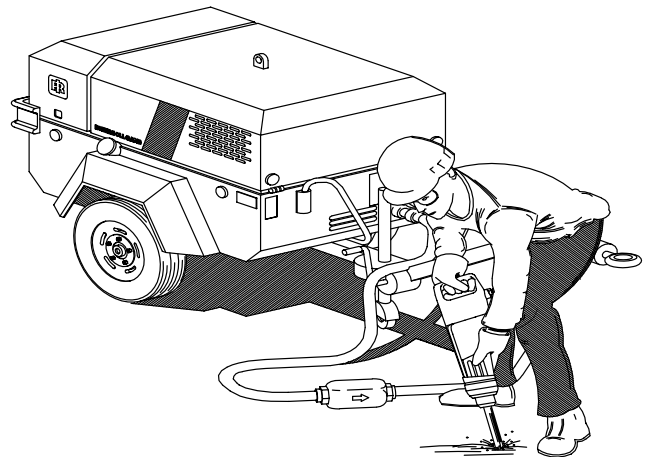
Avant de stocker l'outil, ou si l'on ne prévoit pas d'utiliser l'outil avant vingt-quatre heures, verser environ 3 cm³ d'huile dans le raccord d'admission et faire fonctionner l'outil pendant 5 secondes pour recouvrir toutes les pièces internes d'huile.

INSTALLATION

Alimentation et raccords d'air comprimé

Utiliser toujours de l'air comprimé sec. La poussière, les fumées corrosives et/ou une humidité excessive peuvent endommager le moteur d'un outil pneumatique. Un filtre d'air comprimé peut nettement prolonger la durée de vie d'un outil pneumatique. Le filtre élimine les poussières et l'humidité. Vérifier que tous les tuyaux flexibles et raccords sont correctement dimensionnés. Voir Plan TPD1518 pour un exemple type d'agencement des tuyauteries.

L'outil est expédié de l'usine avec un raccord d'entrée mâle fileté de 3/4 BSP.



(Plan TPD1518)

FONCTIONNEMENT

Montage des accessoires



Couper toujours l'alimentation d'air comprimé et débrancher le flexible d'alimentation avant d'installer, déposer ou ajuster tout accessoire sur cet outil, ou d'entreprendre une opération d'entretien quelconque sur l'outil. Le non respect de ces instructions pourrait conduire à des blessures.

Douille de retenue type décaleur No. DT9-22:

1. Saisir la douille et la dévisser du cylindre.
2. Insérer le burin dans l'ensemble de douille de retenue et le monter sur l'outil. Visser la douille sur le cylindre jusqu'à ce que l'anneau torique tombe dans la gorge de la douille.

MISE EN SERVICE DE L'OUTIL

Douille de retenue type décaleur No. DT9-273:

1. Retirer le carter de protection pour découvrir le trou d'accessoire de la douille de retenue (67).
2. Saisir la douille et la dévisser du cylindre.
3. Insérer la tige du burin dans l'ouverture du décaleur. Visser la douille sur le cylindre jusqu'à ce que l'anneau torique tombe dans la gorge de la douille.

Douille de retenue à loquet No. DT9-240/DT9-340:

1. Actionner le loquet jusqu'à ce qu'il soit à 90 degrés par rapport au corps de l'outil et s'enclenche en position.
2. Insérer le burin dans l'outil jusqu'à ce que le collet du burin ait dépassé le loquet.
3. Ramener le loquet parallèle à l'outil pour qu'il s'enclenche en position.

EXPLOITATION DE L'OUTIL

1. Tenir la poignée (et le devant de l'outil pour le travail horizontal) et appuyer fermement la pointe du burin contre la pièce à travailler).
2. Prendre une position équilibrée et ferme puis appuyer sur la gâchette.
3. L'appui progressif sur la gâchette augmente la puissance.
4. L'expérience indiquera la pression correcte requise pour l'exploitation de l'outil. En règle générale, la pression est correcte lorsque l'outil frappe de façon rythmée alliant confort et efficacité du travail.

NOTE

Ne jamais réparer un outil sur le chantier. Envoyer toujours l'outil à un atelier de réparation. Ne jamais traîner l'outil sur le sol. L'orifice d'air et autres ouvertures seraient bouchés par les saletés et les débris.

AVERTISSEMENT

L'air comprimé est dangereux. Pour souffler les saletés du circuit, porter des lunettes de protection et diriger le flexible vers une zone propre et sûre.

5. Toujours purger le circuit d'air comprimé avant de l'utiliser pour souffler les saletés du circuit.

AVERTISSEMENT

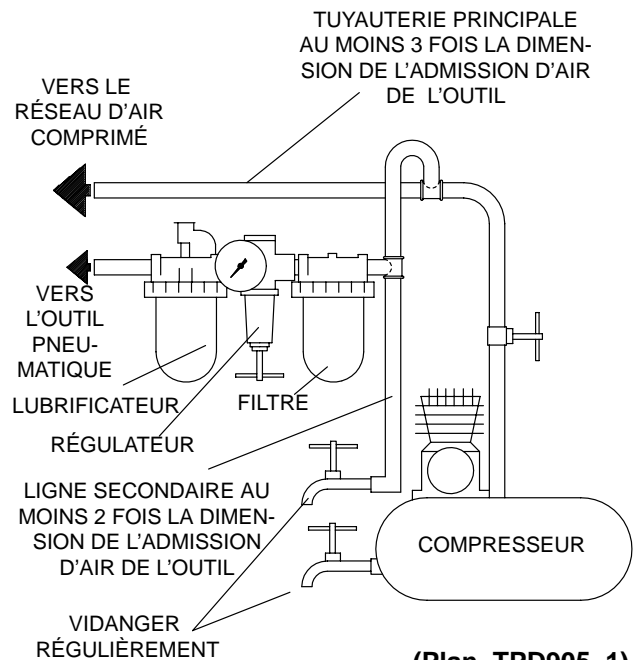
Ne pas mettre l'outil en marche tant que le burin n'est pas appuyé contre la pièce pour ne pas causer l'usure prématurée des pièces et réduire les propriétés anti-vibrantiles de l'outil.

6. Toujours casser le matériau au point de "rupture". La fissuration ne cause pas une rupture complète. Dégager les morceaux au fur et à mesure pour ne pas bloquer le reste du travail.
7. Toujours travailler sur des morceaux de taille adaptée à l'outil. Sur de nouveaux matériaux, tester différentes tailles pour déterminer la taille produisant la taille correspondante à la capacité de l'outil.

NOTE

Si les morceaux sont trop gros, l'opérateur se servira du piqueur comme d'un levier. Ceci peut causer la rupture du burin. Le piqueur est conçu pour la démolition et ne doit pas être utilisé comme un levier. Utiliser toujours un pic comme levier. Si les morceaux sont trop petits, l'opérateur travaillera trop lentement.

8. Si le burin ou un autre accessoire se coince, ne pas utiliser une force excessive ou des moyens mécaniques pour extraire le burin, sous peine d'endommagement de l'ensemble d'amortissement des vibrations. Utiliser un burin de rechange ou un autre piqueur pour libérer le burin coincé.



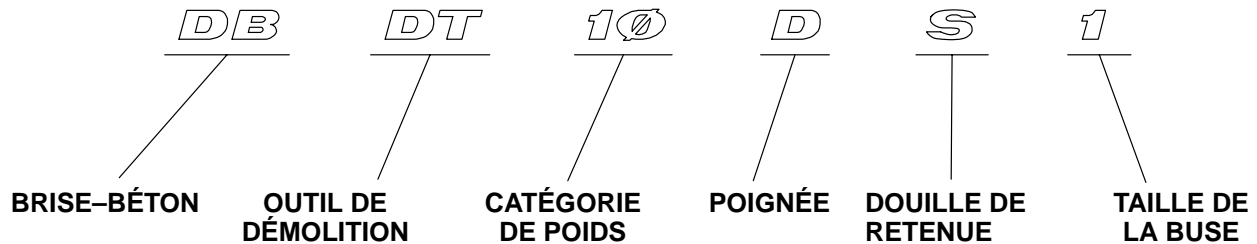
MISE EN SERVICE DE L'OUTIL

SPÉCIFICATIONS

LA SÉRIE DB/DT

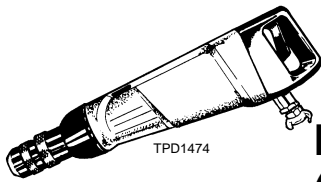
Coups par minute	1560
Course du piston	150 mm
Alésage du piston	42,5 mm
Niveau de vibration accélération effective pondérée ISO 8662 Partie 5	6-7m/s ²
Niveau sonore – Directive CEE 84/537	Puissance acoustique < 108 dB
Niveau sonore – Directive CEE 89/392	100dB (A) Niveau sonore

OUTILS DE DÉMOLITION IRGOPIC CODE DES MODÈLES



10 = 10 Kg	D = POIGNÉE EN D À GÂCHETTE INTÉRIEURE	S = VISSABLE (MANCHON)	1 = 7/8" HEX. X 3-1/4"
13 = 13 Kg	D2 = POIGNÉE EN D À GÂCHETTE EXTÉRIEURE	H = VISSABLE À DÉCALEUR	2 = 1" HEX. X 4-1/4"
	T = POIGNÉE EN T À GÂCHETTE EXTÉRIEURE	L = LOQUET	3 = 25 mm Rond x 75 mm
	D2C = POIGNÉE EN T À GÂCHETTE EXTÉRIEURE AVEC VERROU		4 = 22 mm Rond x 70 mm
	TC = POIGNÉE EN T À GÂCHETTE EXTÉRIEURE AVEC VERROU		5 = 23 mm Rond x 70 mm
			6 = 26 mm Rond x 70 mm

(Plan TPD1689)



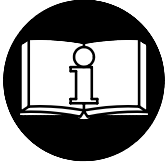
E

MANUAL DE USO Y MANTENIMIENTO PARA LOS IRGOPIC DE LA SERIE DB/DT 10 (MARTILLO NEUMÁTICO DE DEMOLICIÓN DE USO GENERAL)

NOTA

Los IRGOPIC de la serie DB/DT 10 están diseñados para aplicaciones generales de restauración y demolición. Existe una amplia gama de accesorios para uso en la rotura y extracción del hormigón de las barras de refuerzo.

Ingersoll-Rand no aceptará responsabilidad alguna por la modificación de las herramientas efectuada por el cliente para las aplicaciones que no hayan sido consultadas con Ingersoll-Rand.



⚠ AVISO

**SE ADJUNTA INFORMACIÓN IMPORTANTE DE SEGURIDAD.
LEA ESTE MANUAL ANTES DE UTILIZAR LA HERRAMIENTA.
ES RESPONSABILIDAD DE LA EMPRESA ASEGURARSE DE QUE EL
OPERARIO ESTÉ AL TANTO DE LA INFORMACIÓN QUE CONTIENE ESTE MANUAL.
EL HACER CASO OMISO DE LOS AVISOS SIGUIENTES PODRÍA OCASIONAR LESIONES.**

PARA PONER LA HERRAMIENTA EN SERVICIO

- Utilice, examine y mantenga siempre esta herramienta conforme al código de seguridad para herramientas neumáticas portátiles de la American National Standards Institute (ANSI B186.1).
- Para mayor seguridad, rendimiento óptimo y larga vida útil de las piezas, utilice esta herramienta a una presión de aire máxima de 90 psig (6,2 bar/620 kPa) con una manguera de suministro de aire con diámetro interno de 13 mm.
- Corte siempre el suministro de aire y desconecte la manguera de suministro de aire antes de instalar, desmontar o ajustar cualquier accesorio de esta herramienta, o antes de realizar cualquier operación de mantenimiento de la misma.
- No utilice mangueras de aire y racores dañados, desgastados o deteriorados.
- Asegúrese de que todos los racores y mangueras sean del tamaño correcto y estén bien apretados. El Esq. TPD905-1 muestra una disposición característica de las tuberías.
- Use siempre aire limpio y seco a una presión máxima de 90 psig (6,2 bar/620 kPa). El polvo, los gases corrosivos y el exceso de humedad pueden estropear el motor de una herramienta neumática.
- No lubrique las herramientas con líquidos inflamables o volátiles tales como queroseno, gasoil o combustible para motores a reacción.
- No saque ninguna etiqueta. Sustituya toda etiqueta dañada.

UTILIZACIÓN DE LA HERRAMIENTA

- Lleve siempre protección ocular cuando utilice esta herramienta o realice operaciones de mantenimiento en la misma.
- Lleve siempre protección para los oídos cuando utilice esta herramienta.
- Mantenga las manos, la ropa suelta y el cabello largo alejados del extremo giratorio de la herramienta.
- Anticipe y esté atento a los cambios repentinos en el movimiento durante la puesta en marcha y utilización de toda herramienta motorizada.
- Mantenga una postura del cuerpo equilibrada y firme. No estire demasiado los brazos al manejar la herramienta. Pueden darse elevados pares de reacción a la presión de aire recomendada, e incluso a presiones inferiores.
- Los accesorios pueden seguir martilleando brevemente después de soltarse el mando.
- Las herramientas neumáticas pueden vibrar durante el uso. La vibración, los movimientos repetitivos o las posiciones incómodas pueden dañarle los brazos y manos. En caso de incomodidad, sensación de hormigueo o dolor, deje de usar la herramienta. Consulte con el médico antes de volver a utilizarla.
- Utilice únicamente los accesorios Ingersoll-Rand recomendados.
- Esta herramienta no ha sido diseñada para trabajar en ambientes explosivos.
- Esta herramienta no está aislada contra descargas eléctricas.

NOTA

El uso de piezas de recambio que no sean las auténticas piezas Ingersoll-Rand puede poner en peligro la seguridad, reducir el rendimiento de la herramienta y aumentar los cuidados de mantenimiento necesarios, así como invalidar toda garantía.

Las reparaciones sólo se deben encomendar a personal debidamente cualificado y autorizado. Consulte con el centro de servicio autorizado Ingersoll-Rand más próximo.

Toda comunicación se deberá dirigir a la oficina o al distribuidor Ingersoll-Rand más próximo.

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INGERSOLL-RAND®
PROFESSIONAL TOOLS

ETIQUETAS DE AVISO

⚠ AVISO

EL HACER CASO OMISO DE LOS AVISOS SIGUIENTES PODRÍA OCASIONAR LESIONES.

	<p>⚠ ADVERTENCIA</p> <p>Usar siempre protección ocular al manejar o realizar operaciones de mantenimiento en esta herramienta.</p>
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	<p>⚠ ADVERTENCIA</p> <p>Usar siempre protección para los oídos al manejar esta herramienta.</p>
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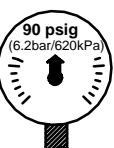
	<p>⚠ ADVERTENCIA</p> <p>Cortar siempre el suministro de aire y desconectar la manguera de suministro de aire antes de instalar, retirar o ajustar cualquier accesorio de esta herramienta, o antes de realizar cualquier operación de mantenimiento de la misma.</p>
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	<p>⚠ ADVERTENCIA</p> <p>Las herramientas neumáticas pueden vibrar durante el uso. La vibración, los movimientos repetitivos o las posiciones incómodas podrían dañarle los brazos y las manos. En caso de incomodidad, sensación de hormigueo o dolor, dejar de usar la herramienta. Consultar al médico antes de volver a utilizarla.</p>
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	<p>⚠ ADVERTENCIA</p> <p>No coger la herramienta por la manguera para levantarla.</p>
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	<p>⚠ ADVERTENCIA</p> <p>No utilizar mangueras de aire y accesorios dañados, desgastados ni deteriorados.</p>
---	---

	<p>⚠ ADVERTENCIA</p> <p>Mantener una postura del cuerpo equilibrada y firme. No estirar demasiado los brazos al manejar la herramienta.</p>
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	<p>⚠ ADVERTENCIA</p> <p>Manejar la herramienta a una presión de aire máxima de 90 psig (6,2 bar/620 kPa).</p>
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AVISOS ESPECÍFICOS SOBRE LOS IRGOPIC

- Cuando lleve guantes al utilizar un modelo que tiene gatillo interno, asegúrese en todo momento de que los guantes no impidan que se suelte el gatillo.
- Use calzado de seguridad, casco protector, gafas de seguridad, guantes, máscara antipolvo y demás prendas protectoras apropiadas cuando utilice esta herramienta.
- No juegue. La distracción puede causar accidentes.
- Mantenga las manos y los dedos apartados de la palanca de mando hasta que esté listo para usar la herramienta.
- No apoye nunca la herramienta o el cincel en los pies.
- No apunte nunca a nadie con la herramienta.
- El aire comprimido es peligroso. No apunte nunca la manguera de aire hacia usted o sus compañeros.
- No quite nunca el polvo de la ropa con aire comprimido.
- Asegúrese de que todas las conexiones de manguera estén bien apretadas. Una manguera floja no solamente pierde aire, sino que puede salirse completamente de la herramienta y dar latigazos (mientras tenga presión) y lesionar al operario y demás personas que se encuentren cerca. Fije cables de seguridad a todas las mangueras para evitar lesiones en el caso de que se rompan accidentalmente.
- No desconecte nunca una manguera de aire con presión. Corte siempre el suministro de aire y purgue la herramienta antes de desconectar una manguera.
- El operario debe mantener el cuerpo, brazos y piernas bien apartados del cincel. Si se rompe el cincel, la herramienta saltará con el cincel roto por delante.
- No se siente sobre la herramienta con una pierna por encima de la empuñadura. Puede causarle daño si se rompe el cincel.
- Debe saber qué hay debajo del material que se está trabajando. Esté alerta por si hay conductos de agua, gas, alcantarillado, o líneas telefónicas o eléctricas escondidas.
- Use solamente los disolventes apropiados para la limpieza de las piezas. Use solamente disolventes de limpieza que cumplan las normas vigentes de seguridad e higiene. Los disolventes deben emplearse en una zona bien ventilada.
- No use gasoil para lavar la herramienta o limpiar las piezas. Los residuos del gasoil se inflamarán en la herramienta al accionarla, dañando las piezas internas. Cuando utilice un modelo con palanca de mando o gatillo externo, tenga cuidado al depositar la herramienta para evitar que se ponga en marcha accidentalmente.
- No utilice la herramienta si tiene piezas rotas o dañadas.
- No ponga nunca la herramienta en marcha cuando está acostada en el suelo.
- Esta herramienta no ha sido diseñada para trabajar en ambientes explosivos.
- Esta herramienta no está aislada contra descargas eléctricas.

PARA PONER LA HERRAMIENTA EN SERVICIO

LUBRICACIÓN



Ingersoll-Rand N°. 10

Utilice siempre un lubricador de aire comprimido con estas herramientas. Recomendamos el siguiente conjunto de filtro-lubricador-regulador:

USA – No. 16LUB16

Acople el lubricador lo más cerca posible de la herramienta.

Después de cada dos o tres horas de uso y al principio de cada turno de trabajo, salvo que se use un lubricador de aire comprimido, desconecte la manguera de aire y eche unos 3 cc de aceite en la admisión de aire de la herramienta.

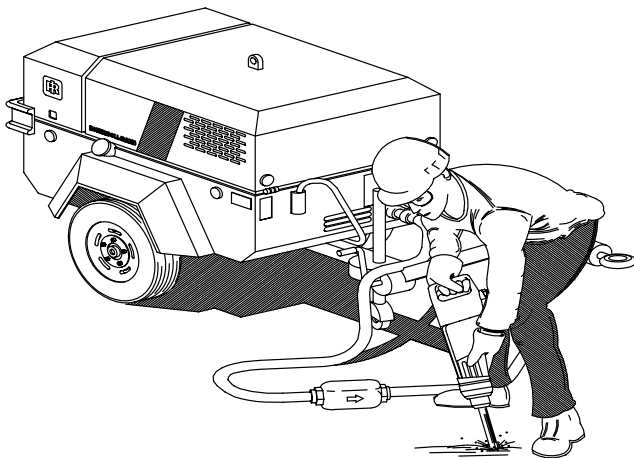
Antes de almacenar la herramienta, o si ésta ha de estar sin usar durante más de 24 horas, eche unos 3 cc de aceite en la admisión de aire y accione la herramienta durante 5 segundos para cubrir de aceite las piezas internas.

INSTALACIÓN

Suministro de aire y conexiones

Use siempre aire limpio y seco. El polvo, los gases corrosivos y el exceso de humedad pueden estropear el motor de una herramienta neumática. El uso de un filtro en la manguera de aire puede aumentar considerablemente la vida útil de una herramienta neumática. El filtro elimina el polvo y la humedad.

Asegurese de que todos los racores y mangueras sean del tamaño correcto y estén bien apretados. El Esq. TPD1518 muestra una disposición característica de las tuberías. La herramienta se despacha de fábrica con una rosca macho de admisión de 3/4 NPT.



(Esq. TPD1518)

MANEJO

Instalación de accesorios

AVISO

Corte siempre el suministro de aire y desconecte la manguera de suministro de aire antes de instalar, desmontar o ajustar cualquier accesorio de esta herramienta, o antes de realizar cualquier operación de mantenimiento de la misma. El no hacerlo conlleva el riesgo de lesionarse.

Para retenedor enroscable N°. DT9-22:

1. Sujete el retenedor y desenrosquelo del cilindro.
2. Introduzca el accesorio a través del retenedor e instálelo en la herramienta. Enrosque el retenedor en el cilindro hasta que sienta caer la junta tórica en la ranura del retenedor.

Para retenedor tipo hendido N°. DT9-273:

1. Desplace el protector para descubrir el orificio de accesorios en el retenedor (67).
2. Sujete el retenedor y desenrosquelo del cilindro.
3. Introduzca el eje del accesorio a través del recorte en el costado de la muescadora. Enrosque el retenedor en el cilindro hasta que sienta caer la junta tórica en la ranura del retenedor.

Para retenedor tipo palanca N°. DT9-240/DT9-340:

1. Accione el enganche hasta que esté perpendicular al cuerpo de la herramienta y encaje en su posición.
2. Introduzca el accesorio en la herramienta hasta que el cuello del accesorio pase el enganche.
3. Accione el enganche hasta que esté paralelo a la herramienta y encaje en su posición.

MANEJO DE LA HERRAMIENTA

1. Sujete la empuñadura (y la parte delantera de la herramienta si la está usando en posición horizontal) y empuje con fuerza para que la punta del cincel penetre en la superficie a trabajar.
2. Adopte una postura firme y equilibrada y apriete el gatillo.
3. Para aumentar la potencia, apriete más el gatillo.
4. La experiencia indicará la presión correcta a aplicar a la herramienta. Por lo general, la presión será la correcta cuando la herramienta trabaje rítmicamente, resulte cómoda de sujetar y funcione de manera eficaz.

NOTA

No repare la herramienta en el lugar de trabajo. Lleve siempre la herramienta a un taller de reparación. No arrastre nunca la herramienta por el suelo. La lumbrera de aire y demás aberturas pueden obstruirse con tierra y residuos.

PARA PONER LA HERRAMIENTA EN SERVICIO

PRECAUCIÓN

El aire comprimido es peligroso. Al desatascar la tubería con aire comprimido, protéjase los ojos y mantenga la manguera apuntada hacia un lugar seguro y despejado.

5. Sopla siempre la manguera de aire antes de utilizarla para despejar la tubería.

PRECAUCIÓN

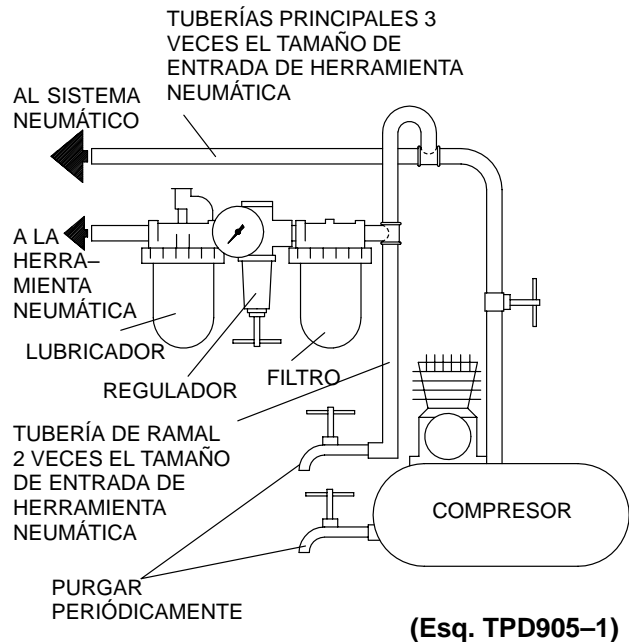
No accione la herramienta si el cincel no está contra la superficie de trabajo, ya que de lo contrario se ocasionará un desgaste prematuro de las piezas y se reducirán las propiedades antivibratorias de la herramienta.

6. Rompa siempre el material hasta el punto de “ceder”. El agrietarlo no produce una rotura completa. Vaya apartando los escombros a medida que se rompen ya que si se dejan acumular, obstruirán el punto de “ceder”.
7. Busque siempre el tamaño apropiado a arrancar con la herramienta. Cuando trabaje con un material nuevo, experimente para encontrar la cantidad correcta a arrancar para poder romperlo eficazmente.

NOTA

Si se intenta romper trozos muy grandes, el operario intentará hacer palanca con la herramienta. Esto puede romper el cincel. La herramienta está diseñada para demoler y no para apalancar. Para esto último, utilice siempre un pico. Si se rompen trozos muy pequeños, el operario trabajará muy lentamente.

8. Si el cincel o el accesorio se quedan atascados, no aplique una fuerza excesiva ni medios mecánicos a la herramienta para extraer el cincel. El hacerlo estropeará el conjunto antivibratorio. Saque el cincel atascado rompiendo el material alrededor con otro cincel o herramienta.



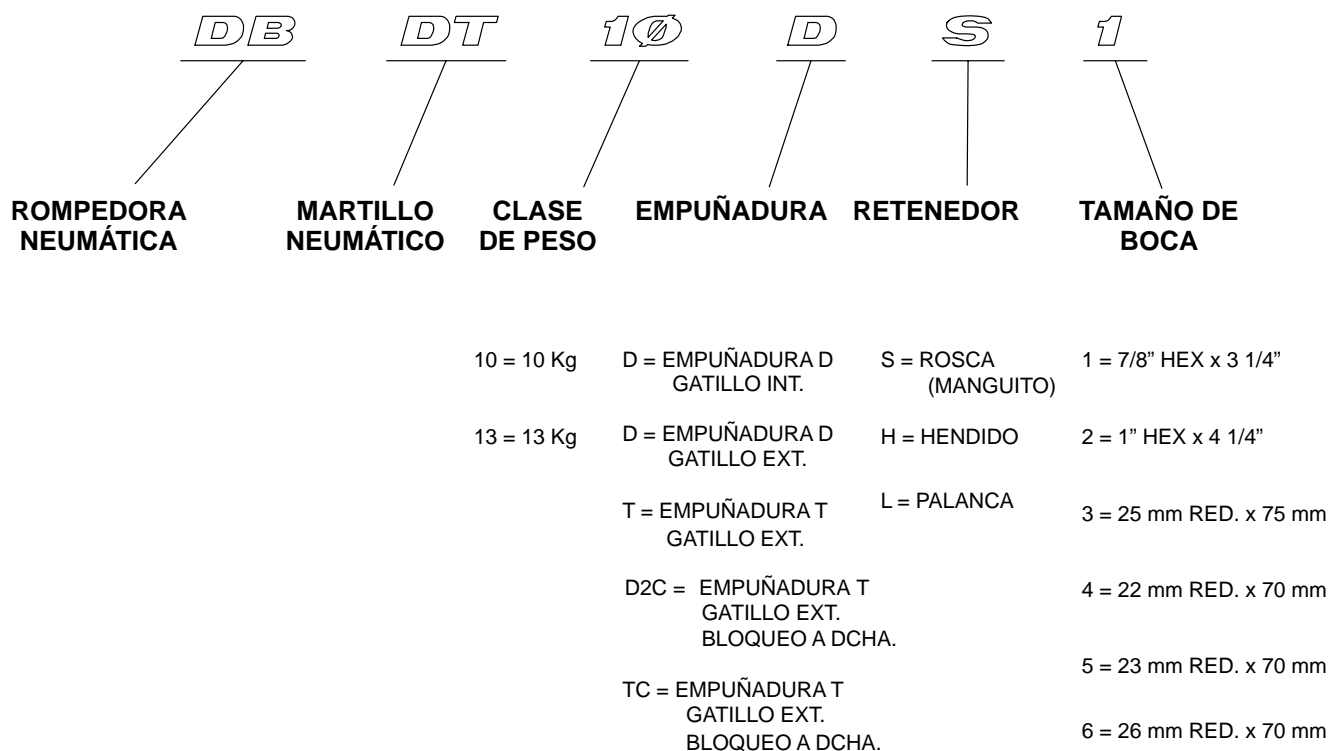
PLACING TOOL IN SERVICE

ESPECIFICACIONES

SERIE DB/DT

Impactos por minuto	1560
Carrera del pistón	150 mm
Diámetro interno del cilindro	42,5 mm
Nivel de vibración – aceleración efectiva ponderada ISO 8662 Parte 5	6–7m/s ²
Nivel de ruido – Directiva CE 84/537/CEE	<108LWA potencia de sonido
Nivel de ruido – Directiva CE 89/392/CEE	100dB (A) presión de sonido

MARTILLOS NEUMÁTICOS DE DEMOLICIÓN IRGOPIC DESGLOSE DEL CÓDIGO DE MODELO



(Esq. TPD1689)

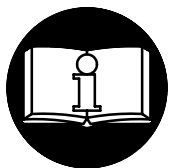
MANUAL DE FUNCIONAMENTO E MANUTENÇÃO PARA IRGOPIC SÉRIE DB/DT 10 (FERRAMENTA PNEUMÁTICA DEMOLIDORA)

AVISO

Os IRGOPICS Série DB/DT 10 são concebidos para demolição de finalidade geral em aplicações de construção, restauração e demolição. Há uma ampla gama de acessórios para utilização ao partir e retirar betão de barras de reforço.

A Ingersoll-Rand não pode ser responsabilizada pela modificação de ferramentas para aplicações para as quais não tenha sido consultada.

⚠️ ADVERTÊNCIA



**IMPORTANTES INFORMAÇÕES DE SEGURANÇA EM ANEXO.
LEIA ESTE MANUAL ANTES DE OPERAR A FERRAMENTA.
É RESPONSABILIDADE DA ENTIDADE PATRONAL PÔR AS INFORMAÇÕES
CONTIDAS NESTE MANUAL À DISPOSIÇÃO DOS UTILIZADORES.
A NÃO OEDIÊNCIA ÀS ADVERTÊNCIAS SEGUINTE
PODERÁ RESULTAR EM LESÕES PESSOAIS.**

COLOCAÇÃO DA FERRAMENTA EM SERVIÇO

- Sempre opere, inspeccione e mantenha esta ferramenta de acordo com o Código de Segurança do Instituto Americano de Padrões Nacionais para Ferramentas Pneumáticas Portáteis (ANSI B186.1).
- Para segurança, desempenho superior e durabilidade máxima das peças, opere esta ferramenta a uma pressão de ar máxima de 90 psig (6,2 bar/620 kPa) na admissão com uma mangueira de alimentação de ar com diâmetro interno de 1/2 pol. (13 mm).
- Desligue sempre a alimentação de ar e a mangueira de alimentação de ar antes de instalar, retirar ou ajustar qualquer acessório desta ferramenta, ou antes de fazer manutenção na mesma.
- Não utilize mangueiras de ar e acessórios danificados, puídos ou deteriorados.
- Certifique-se de que todas as mangueiras e acessórios são da dimensão correcta e que estão seguros firmemente. Consulte o Des. TPD905-1 para uma disposição de tubos típica.
- Utilize sempre ar limpo e seco a uma pressão máxima de 90 psig (6,2 bar/620 kPa). Poeira, fumos corrosivos e/ou humidade excessiva podem destruir o motor de uma ferramenta pneumática.
- Não lubrifique a ferramenta com líquidos inflamáveis ou voláteis como querosene, gasóleo ou combustível para jactos.
- Não retire nenhum rótulo. Substitua os rótulos danificados.

UTILIZAÇÃO DA FERRAMENTA

- Use sempre protecção para os olhos ao operar ou fazer manutenção nesta ferramenta.
- Use sempre protecção auricular ao operar esta ferramenta.
- Mantenha as mãos, roupas soltas e cabelos longos afastados da extremidade rotativa da ferramenta.
- Esteja preparado e alerta para mudanças súbitas no movimento durante o arranque e o funcionamento de qualquer ferramenta mecânica.
- Mantenha o corpo numa posição equilibrada e firme. Não estique o corpo ao operar esta ferramenta. Podem ocorrer binários de reacção elevados à ou abaixo da pressão do ar recomendada.
- Os acessórios da ferramenta podem continuar a percutir por um curto período de tempo depois de soltar o regulador.
- A ferramentas pneumáticas podem vibrar durante a utilização. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser nocivos às suas mãos e braços. Pare de utilizar qualquer ferramenta se ocorrer desconforto, sensação de formigueiro ou dor. Procure assistência médica antes de reiniciar a utilização.
- Use os acessórios recomendados pela Ingersoll-Rand.
- Esta ferramenta não é concebida para funcionar em atmosferas explosivas.
- Esta ferramenta não é isolada contra choque eléctrico.

AVISO

A utilização de qualquer peça sobresselente que não seja Ingersoll-Rand genuína pode resultar em riscos para a segurança, em desempenho reduzido da ferramenta e mais necessidade de manutenção, e pode invalidar todas as garantias.

As reparações só devem ser feitas por pessoal autorizado e com formação adequada. Consulte o Representante Autorizado Ingersoll-Rand mais próximo.

Envie toda a correspondência ao Escritório ou Distribuidor Ingersoll-Rand mais próximo.

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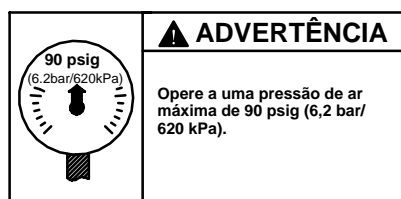
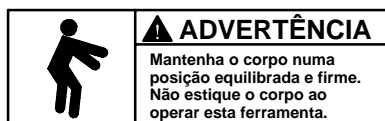
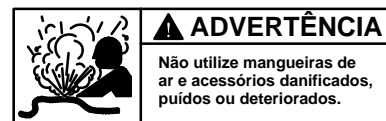
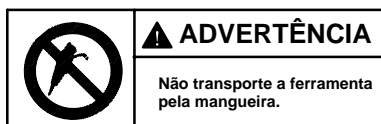
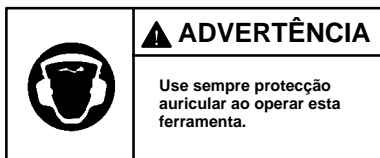
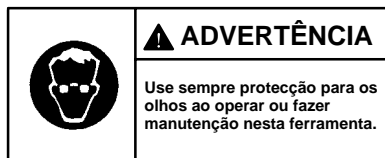
Impresso nos E.U.A.

INGERSOLL-RAND®
PROFESSIONAL TOOLS

IDENTIFICAÇÃO DAS ETIQUETAS DE ADVERTÊNCIA

⚠ ADVERTÊNCIA

A NÃO OBEDIÊNCIA ÀS ADVERTÊNCIAS SEGUINTE PODERÁ RESULTAR EM LESÕES PESSOAIS.



ADVERTÊNCIAS ESPECÍFICAS PARA O IRGOPIC

- Quando estiver a usar luvas e modelos com gatilho interno, certifique-se sempre de que as luvas não impedirão a libertação do gatilho.
- Use sapatos de segurança, capacete, óculos de segurança, luvas, máscara contra poeira e qualquer outra roupa de protecção adequada ao operar esta ferramenta.
- Não se entregue a brincadeiras. Distracções podem provocar acidentes.
- Mantenha as mãos e os dedos afastados da alavanca do regulador até estar na hora de utilizar a ferramenta.
- Nunca pouse a ferramenta ou o formão no pé.
- Nunca aponte a ferramenta para ninguém.
- Ar comprimido é perigoso. Nunca aponte uma mangueira de ar para si ou para os seus colegas de trabalho.
- Nunca use ar comprimido para tirar poeira das roupas.
- Certifique-se de que todas as ligações estão apertadas. Uma mangueira frouxa não só tem fugas, mas também pode libertar-se totalmente da ferramenta e, enquanto chicoteia sob pressão, pode lesar o operador e outros presentes na área. Prenda cabos de segurança em todas as mangueiras para impedir lesões no caso de uma mangueira partir acidentalmente.
- Nunca desligue uma mangueira pressurizada. Desligue a alimentação de ar e sangre a ferramenta sempre antes de desligar a mangueira.
- O operador tem que manter os membros e o corpo afastados do formão. Se um formão partir, a ferramenta com o formão partido protuberante saltará repentinamente para a frente.
- Não monte na ferramenta com uma perna sobre a pega. Podem ocorrer lesões se o formão partir enquanto está montado na ferramenta.
- Saiba o que está por baixo do material a ser trabalhado. Esteja alerta para tubos de água, gás, esgoto, telefone ou electricidade.
- Utilize apenas solventes de limpeza adequados para limpar as peças. Utilize apenas solventes de limpeza que obedeçam às normas correntes de saúde e segurança no trabalho. Utilize solventes numa área bem ventilada.
- Não lave a ferramenta ou limpe qualquer peça com gasóleo. O resíduo de gasóleo inflamar-se-á na ferramenta quando esta for operada, provocando danos nas partes internas. Ao utilizar modelos com gatilhos externos ou alavancas reguladoras, tome cuidado ao pousar a ferramenta para não a operar acidentalmente.
- Não opere a ferramenta com peças partidas ou danificadas.
- Nunca arranque a ferramenta quando esta estiver deitada no solo.
- Esta ferramenta não é concebida para funcionar em atmosferas explosivas.
- Esta ferramenta não é isolada contra choque eléctrico.

COLOCAÇÃO DA FERRAMENTA EM SERVIÇO

LUBRIFICAÇÃO



Ingersoll-Rand N° 10

Utilize sempre um lubrificador de linha de ar com estas ferramentas. Recomendamos a seguinte Unidade Filtro-Lubrificador-Regulador:

USA – No. 16LUB16

Ligue o lubrificador tão perto da ferramenta quanto for possível.

Após cada duas ou três horas de funcionamento e no início de cada turno de trabalho, se não estiver a ser utilizado um lubrificador de linha de ar, desligue a mangueira de ar e verta cerca de 3 cc de óleo na admissão de ar da ferramenta.

Antes de guardar a ferramenta ou se esta for ficar parada por mais de vinte-e-quatro horas, verta cerca de 3 cc de óleo na admissão de ar e opere a ferramenta por 5 segundos para revestir as partes internas com óleo.

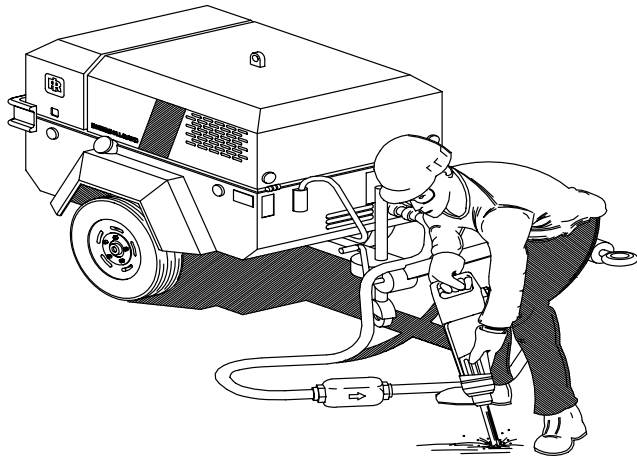
INSTALAÇÃO

Alimentação de Ar e Ligações

Utilize sempre ar limpo e seco. Poeira, fumos corrosivos e/ou humidade excessiva podem destruir o motor de uma ferramenta pneumática. Um filtro de linha de ar pode aumentar muito a duração de uma ferramenta pneumática. O filtro remove poeira e humidade.

Certifique-se de que todas as mangueiras e acessórios são da dimensão correcta e que estão seguros firmemente. Consulte o Des.TPD1518 para uma disposição de tubos típica.

A ferramenta é enviada da fábrica com rosca de admissão macho de 3/4" NPT.



(Des. TPD1518)

FUNCIONAMENTO

Instalação de Acessórios

⚠ ADVERTÊNCIA

Desligue sempre a alimentação de ar e a mangueira de alimentação de ar antes de instalar, retirar ou ajustar qualquer acessório desta ferramenta, ou antes de fazer manutenção na mesma. Se isto não for feito, poderá resultar em lesões pessoais.

Para o Retentor Tipo de Aparafusar N° DT9-22:

1. Segure o Retentor e desaparafuse-o do Tambor.
2. Introduza o acessório através do Conjunto do Retentor e instale-o na ferramenta. Aparafuse o Retentor no tambor até sentir que o "O-ring" do Retentor cai na ranhura do Retentor.

Para Retentor Tipo Fendido N° DT9-273:

1. Retraia o resguardo para descobrir a entrada dos acessórios no retentor (67).
2. Segure o Retentor e desaparafuse-o do Tambor.
3. Introduza a parte da haste do acessório através do corte no lado do Engate. Aparafuse o Retentor no tambor até sentir que o "O-ring" do Retentor cai na ranhura do Retentor.

Para Retentor Tipo Alavanca N° DT9-240/DT9-340:

1. Opere a Alavanca até esta estar a 90 graus em relação ao corpo da ferramenta e encaixar em posição.
2. Introduza o acessório através do Conjunto do Retentor e instale-o na ferramenta.
3. Opere a Alavanca até esta estar paralela em relação ao corpo da ferramenta e encaixar em posição.

OPERAÇÃO DA FERRAMENTA

1. Segure a pega (e a frente da ferramenta se estiver a trabalhar horizontalmente) e pressione a ponta do formão firmemente para dentro da peça de trabalho.
2. Mantenha o corpo numa posição equilibrada e firme e aperte o Gatilho.
3. A potência é aumentada pressionando o Gatilho.

COLOCAÇÃO DA FERRAMENTA EM SERVIÇO

4. A experiência indicará a pressão correcta para a ferramenta. Normalmente, a pressão está correcta quando a ferramenta bate ritmadamente, fica confortável de segurar e funciona eficazmente.

AVISO

Não repare a ferramenta no local de trabalho. Sempre leve a ferramenta até à oficina. Nunca arraste a ferramenta no solo. A abertura do ar e as outras aberturas ficarão obstruídas com sujidade e detritos.

CUIDADO

Ar comprimido é perigoso. Ao utilizar ar para limpar sujidades da linha, use protecção para os olhos e mantenha a linha de ar dirigida para uma área segura e desocupada.

5. Sempre dê um jacto de ar na linha antes de ligar a ferramenta.

CUIDADO

Não opere a ferramenta sem que o formão esteja apoiado no trabalho, pois isto provocará desgaste prematuro das peças e reduzirá as propriedades de isolamento de vibração da ferramenta.

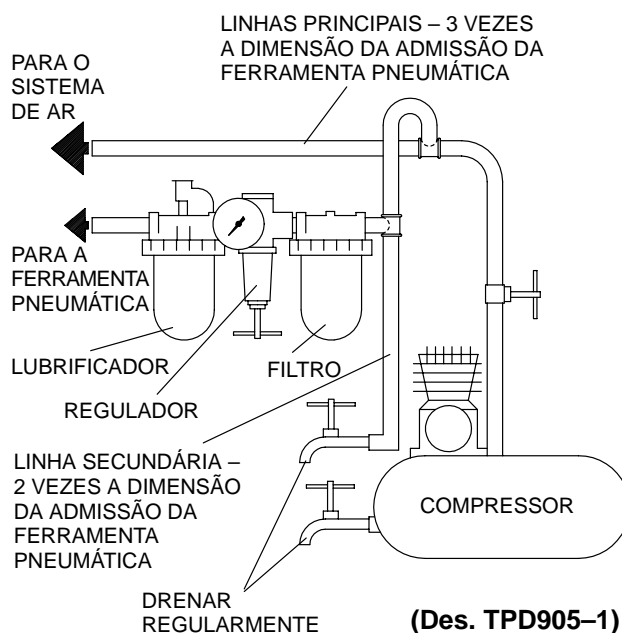
6. Parta sempre o material até ao ponto de “ceder”. Rachar não resulta em partir completamente. Afaste os fragmentos à medida que são partidos, pois os fragmentos bloqueiam o ponto de “ceder”.
7. Tome sempre a dimensão correcta da “mordida” com a ferramenta. Ao trabalhar um material novo, faça experiências para encontrar a dimensão correcta da “mordida” necessária para partir eficazmente o material.

AVISO

Se as “mordidas” forem demasiado grandes, o operador tentará forçá-las com a ferramenta. Isto poderia quebrar o formão. A ferramenta é concebida para demolição, não para forçar para fora. Utilize sempre uma picareta para forçar como com uma alavanca.

Se as “mordidas” forem demasiado pequenas, o operador estará a trabalhar muito devagar.

8. Se o formão ou acessório ficar preso, não use força excessiva ou meios mecânicos da ferramenta para sacar o formão. Se fizer isto, danificará a unidade de isolamento de vibração. Parta o formão preso com outro formão ou ferramenta.




COLOCAÇÃO DA FERRAMENTA EM SERVIÇO

ESPECIFICAÇÕES

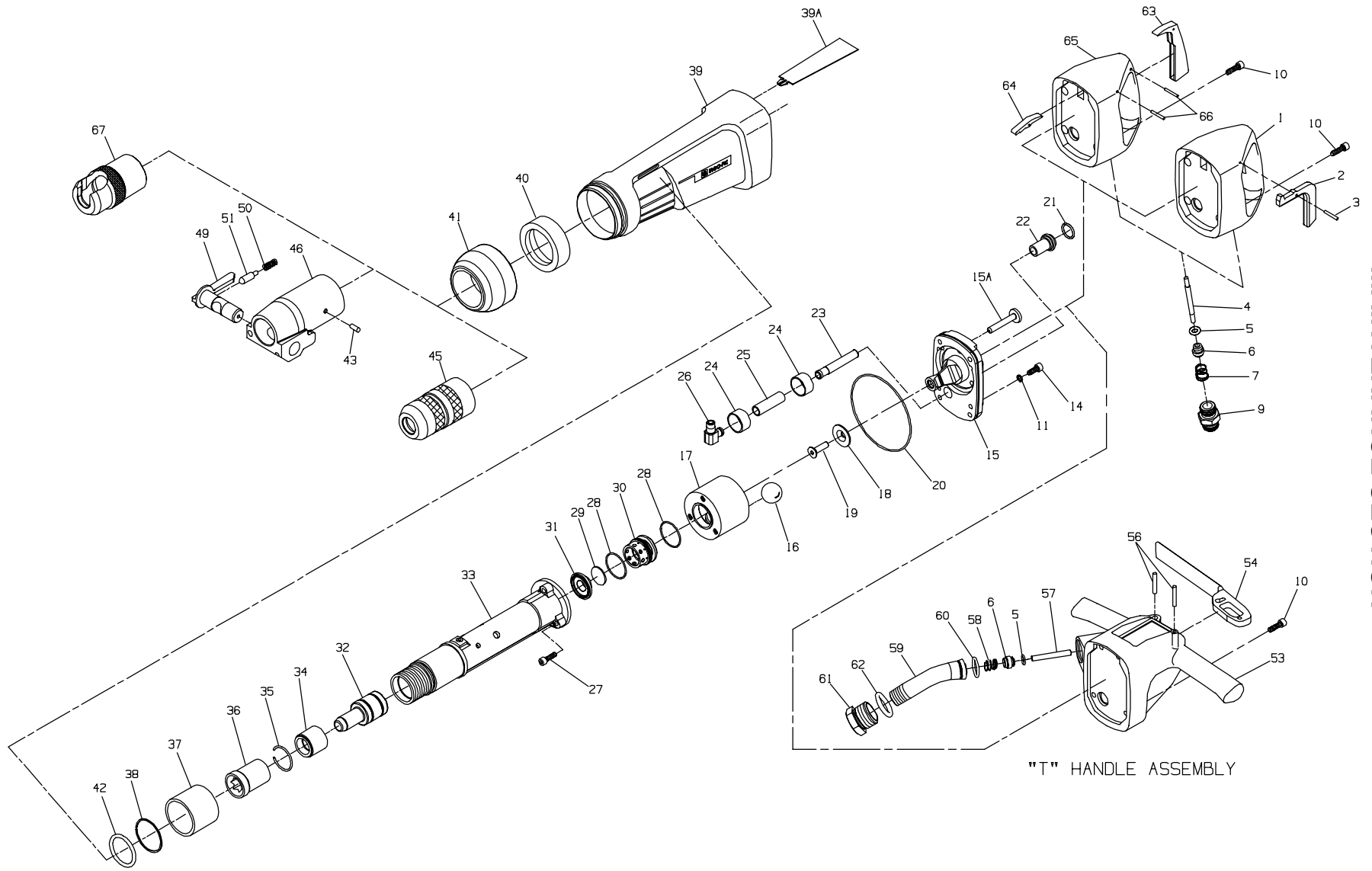
SÉRIE DB/DT

Sopros por minuto	1.560
Curso do Pistão	150 mm
Diâmetro Interno do Pistão	42,5 mm
Aceleração RMS Ponderada do Nível de Vibração ISO 8662 Parte 5	6-7m/s ²
Nível de Ruído Directiva EC 84/537/EEC	<108LWA Potência de Som
Nível de Ruído Directiva EC 89/392/EEC	100dB (A) Pressão de Som

FERRAMENTAS DEMOLIDORAS IRGOPIC CÓDIGOS DOS MODELOS

<i>DB</i>	<i>DT</i>	<i>10</i> 	<i>D</i>	<i>S</i>	<i>1</i>
DEMOLIDOR	FERRAMENTA DEMOLIDORA	CLASSE DE PESO	PEGA	RETENTOR	DIMENSÃO DO BOCAL
		10 = 10 Kg	D = PEGA EM D – GATILHO INT	S = APARAFUS (LUVA)	1 = 7/8"HEX x 3-1.4"
		13 = 13 Kg	D2 = PEGA EM D – GATILHO EXT	H = FENDIDO	2 = 1"HEX x 4-1.4"
			T = PEGA EM T – GATILHO EXT	L = ALAVANCA	3 = 25mm RED x 75mm
			D2C = PEGA – GATILHO EXT- COMPL.C/TRAVA		4 = 22mm RED x 70mm
			TC = PEGA – GATILHO EXT- COMPL.C/TRAVA		5 = 23mm RED x 70mm
					6 = 26 mm RED x 70mm

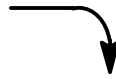
(Des. TPD1689)



(Dwg. TPA1370-5)



PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



	Inside Trigger Handle Assembly	DT10-A92	29	Valve	DT10-2
1	Inside Trigger Handle	DT10-92X	30	Valve Cap	DT10-4
2	Inside Trigger	DT10-93	31	Valve Seat	DT10-3
3	Trigger Pin	DT10-120	32	Piston	DT10-5
4	Throttle Valve Plunger	DT10-65	33	Barrel	DT10-6
• 5	Throttle Valve O-ring	51717239	34	Cushion Bushing	DT10-101
6	Throttle Valve	51716561	35	Cushion Bushing Retaining Clip	DT10-33
7	Throttle Valve Spring	DT10-51	36	Nozzle	
9	Inlet Bushing	DT10-565		7/8" x 3-1/4" (22 x 82.5 mm)	
10	Handle Cap Screw (4) (8 mm thread/6 mm hex) .	DT10-636		hex shank	DT10-86-1
11	Lock Washer (4)	DT10-58		1" x 4-1/4" (25 x 108 mm)	
14	Isolator Cap Screw (4)	DT10-638		hex shank	DT10-86-2
	Isolator Assembly	DT10-A203		7/8" x 2-3/4" (22 x 70 mm)	
15	Male Isolator	DT10-203W		round shank	DT10-86-4
15A	Anti-Rotation Pin (3)	DT10-74		23 x 70 mm round shank	DT10-86-5
• 16	Isolator Ball (3)	DT10-203Z		25 x 75 mm round shank	DT10-86-3
17	Female Isolator	DT10-203X		26 x 70 mm round shank	DT10-86-6
18	Male Nosecap	DT10-203Y	• 37	Inner Lower Sleeve	DT10-209W
19	Male Nosecap Screw	DT10-203V	38	Retaining Clip	DT10-35
• 20	O-ring	DT10-310			
• 21	O-ring	DT10-211			
• 22	Air Feed Bushing	DT10-167			
+ • 23	Air Feed Tube Assembly	DT10-A266			
+ 24	Hose Clamp (2)	—			
+ 25	Hose Piece	—			
+ 26	Elbow	—			
27	Cap Screw (3) (10 mm thread/8 mm hex)	DT10-732			
• 28	O-ring (2)	DT10-210			

MAINTENANCE SECTION

- 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.
- + Air Feed Tube (23), Hose Clamp (24), Hose Piece (25) and Elbow (26) are part of the Air Feed Tube Assembly. To replace these items, order Air Feed Tube Assembly part number DT10-A166.

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

	Cover Assembly	DT10-A674	49	Latch	DT9-241
*	Warning Label		50	Plunger Spring	DT10-567
	for -EU models	EU-99	51	Plunger	DT10-245
	for all other models	WARNING-6-99		T Handle Assembly	DT13-A135
39	Cover	DT10-674	53	T Handle	DT13-135
39A	Exhaust Baffle	DT10-674Y	54	Throttle Lever	DT13-66
40	Outer Lower Bushing	DT10-209X	56	Roll Pin (2)	DT13-120
41	Front End Cap	DT10-303	57	Valve Plunger	DT13-65
• 42	O-ring	DT10-103	58	Throttle Spring	50250539
43	Retaining Pin (for Fronthead-type Retainers) . .	DT10-242Y	59	Swivel Connector	51609295
45	Screw-on Retainer		60	O-ring Connector	95086161
	7/8" x 3 1/4"		61	Connection Cap	51361798
	(22 x 82 mm) hex shank	DT9-22-1/3	62	O-ring Cap	95086112
	22 x 70 mm round shank	DT9-22-4/5		Outside Trigger Assembly	DT10-A1
	23 x 70 mm round shank	DT9-22-4/5	63	Outside Trigger	DT10-78
	25 x 75 mm round shank	DT9-22-1/3	64	Intermediate Lever	DT10-79
	26 x 70 mm round shank	DT9-22-6	65	Outside Trigger Handle	DT10-1
46	Fronthead (bare)		66	Pin (2) (Intermediate Lever Pin, Trigger Pin)	DT10-120
	for 22 x 70 mm round shank	DT9-240-4/5	67	Hitchcutter Retainer	
	for 23 x 70 mm round shank	DT9-240-4/5		7/8" x 3 1/4"	
	for 25 x 75 mm round shank	DT9-240-1/3/6		(22 x 82 mm) hex shank	DT9-273-1/3
	for 26 x 70 mm round shank	DT9-240-1/3/6		22 x 70 mm round shank	DT9-273-4/5
	Fronthead Assembly			23 x 70 mm round shank	DT9-273-4/5
	for 7/8" x 3 1/4" (22 x 82 mm)			25 x 75 mm round shank	DT9-273-1/3
	hex shank	DT9-A240-1/3/6		26 x 70 mm round shank	DT9-273-6
	for 1" x 4 1/4" (25 x 108 mm)		*	Hitchcutter Retainer Guard	DT10-23
	hex shank	DT9-A340-2	*	Swivel Inlet Connector	DT9-A167
46	Fronthead (bare)		*	Air Feed Tube Assembly (for models with power Regulator)	DT10-A166
	for 7/8" x 3 1/4 (22 x 82 mm)				
	hex shank	DT9-240-1/3/6			
	for 1" x 4 1/4" (25 x 108 mm)				
	hex shank	DT9-340-2			

MAINTENANCE SECTION

* 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.

MAINTENANCE SECTION

WARNING

Always wear eye protection when operating or performing maintenance on this tool.

Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool or before performing any maintenance on this tool.

LUBRICATION

Each time a DB/DT 10 IRGOPIC is disassembled for maintenance and repair or replacement of parts, pour about 3 cc of Ingersoll-Rand No. 10 Oil in the air inlet and operate the tool for 5 seconds to coat the internal parts with oil.

After each two or three hours of operation and at the beginning of each shift, flush the tool and lubricate immediately afterwards as instructed in **Placing the Tool in Service**.

DISASSEMBLY

General Instructions

1. Do not disassemble the tool any further than necessary to replace or repair damaged parts
2. Whenever grasping tool or part in a vise, always use leather-covered or copper-covered vise jaws to protect the surface of the part and help prevent distortion. This is particularly true of threaded members and housings.
3. Do not remove any part which is a press fit in or on a subassembly unless the removal of that part is necessary for repairs or replacement.
4. Do not disassemble the tool unless you have a complete set of new gaskets and O-rings for replacement.

Disassembly of the Retainer

For Screw-on Retainer

1. Remove the Chisel, unscrew the Retainer (45).

For Latch Retainer

1. Remove the Retaining Spring (if fitted) and extract the Stop Pin.

NOTICE

On later models, the Pin is filled and retained in place with a plug of silicone sealer. This plug should be removed with a pointed object and the pin extracted.

2. Unscrew the Fronthead (46) from the Barrel (33). If the Fronthead does not need to be disassembled for service or repair, set it aside intact. If it does need to be disassembled, refer to Disassembly of the Fronthead.

For Hitch Cutter Retainer

1. Unscrew the Retainer (67) from the Barrel (33) complete with Guard.

Disassembly of the Fronthead

WARNING

Remove the Latch slowly and carefully as the Plunger (51) could be ejected out of the Fronthead by the force of the Spring (50).

1. Position the Latch until it is 3/4 of a turn from the closed position. Use a suitable drift and tap the Latch slowly and carefully until it is removed.
2. Remove the Plunger (51) and Spring from the Fronthead.

Disassembly of the Tool

1. Using a 6 mm hex wrench, remove the four Handle Cap Screws (10) from the rear of the Handle and remove the Handle Assembly.
2. Remove the Air Feed Bushing (22) and O-Ring (21). The three Anti-Rotation Pins (15A) are a slip fit. They may be removed or left in the Isolator Assembly.
3. Using a 6mm hex wrench, unscrew the four Isolator Cap Screws (14) and Lock Washers (11).
4. To remove the Barrel Assembly and Isolator Assembly, secure the protruding portion of the Male Isolator (15) in leather-covered or copper-covered vise jaws with the Barrel (33) facing upward. Pull upward on the Cover (39) until it separates and lifts off from the Isolator Assembly and Barrel Assembly.
5. Grip the Barrel (31) in leather-covered or copper-covered vise jaws taking care not to over-tighten and distort the Barrel. Using an 8mm hex wrench, unscrew the three Cap Screws (27) which secure the Isolator Assembly to the Barrel. Remove the Isolator Assembly.
6. Remove the Barrel from the vise keeping it in an upward position. Place the Barrel Assembly flat on a work bench. Using a suitable soft drift inserted from the Nozzle end of the tool, gently tap the Piston (32) to the top of the Barrel. Continue to tap the drift gently until the Valve parts are ejected from the Barrel. Remove the Piston.

Disassembly of the Inside Trigger Assembly

1. Grip the body of the Handle in leather-covered or copper-covered vise jaws and unscrew the Inlet Bushing (9).
2. Remove the Handle from the vise and gently tap the protruding steel portion of the Handle on the workbench. This will allow the Throttle Valve Plunger (4), Throttle Valve (6) with Throttle Valve O-ring (5) and Throttle Valve Spring (7) to slide from the bore of the Handle.

MAINTENANCE SECTION

NOTICE

Do not attempt to remove the threaded steel portion of the Handle. This part is molded in and is not a serviceable item.

- Using a long pin punch, drive the Trigger Pin (3) clear of the Trigger (2). Remove the Trigger from the front face of the Handle.

Disassembly of the Outside Trigger Assembly

- Grip the body of the Handle (65) in leather-covered or copper-covered vise jaws and unscrew the Inlet Bushing (9).
- Remove the Handle from the vise and gently tap the protruding steel portion of the Handle on a workbench. This will allow the Throttle Valve Plunger (4), Throttle Valve (6) with Throttle Valve O-ring (5) and Throttle Valve Spring (7) to slide from the bore of the Handle.

NOTICE

Do not attempt to remove the threaded steel portion of the Handle. This part is molded in and is not a serviceable item.

- Using a suitable long pin punch, drive the Trigger Pin (66) clear of the Trigger (63). Remove the Trigger from the rear of the Handle.
- Using a long pin punch, drive the Intermediate Lever Pin (66) clear of the Intermediate Lever (64). Remove the Intermediate Lever from the front face of the Handle.

Disassembly of the T Handle

- Grip the body of the Handle (53) in leather-covered or copper-covered vise jaws and unscrew the Air Connection Cap (61). Extract the Air Connection (59) from the taper in the Air Connection Cap.
- Remove the Handle from the vise and gently tap the air inlet on a workbench. This will allow the Throttle Valve Plunger (57), Throttle Valve (6) with Throttle Valve O-ring (5) and Throttle Valve Spring (58) to slide from the bore of the Handle.
- Using a suitable pin punch, drive the Pins (56) out of the Handle and extract the Throttle Valve Lever (54).

Disassembly of the Cover

- The Outer Lower Bushing (40) is retained by the Front End Cap (41) which is a snap fit onto the Cover. To remove the Front End Cap, use a suitable soft drift and drive the Outer Lower Bushing from inside the Cover (39) until the Front End Cap breaks free of the snap fit.

Disassembly of the Barrel

- Unscrew the Elbow (26) of the Air Feed Assembly (23) from the barrel thread. Remove the complete Assembly.

NOTICE

The parts are supplied only as an assembly.

⚠ WARNING

The press fit between the Barrel (33) and the Nozzle (36) and Cushion Bushing (34) is heavy interference and a suitably guarded press should be used.

- Remove the Nozzle with a pressing bar which just passes through the Cushion Bushing and press out from the Valve end of the Barrel.

NOTICE

Removal of the 1" Hex Nozzle (DT10-S6-2) may require that the Cushion Bush (34) be removed first to allow a larger pressing bar access to the Nozzle. The Cushion Bush Retaining Clip (35) usually does not need to be removed.

- Should the Bushing Retaining Clip (35) require replacement, press the Cushion Bushing down the Barrel toward the valve bore end approximately 1/4" (6 mm). Using a pointed drift and long nose pliers, extract the Clip. Always install a new clip on reassembly.

NOTICE

If the Lower Inner Sleeve (37) must be removed, have another on hand as it is likely to be damaged during removal.

- To remove the Lower Inner Sleeve, remove the Retaining Clip (38) and drive off the Barrel using a suitable drift.

Disassembly of the Isolator

- Remove the Nose Cap Screw (19) and the Male Nosecap (18).
- Grip the Isolator (15) in leather-covered or copper-covered vise jaws. The Female Isolator (17) can now be pulled away.

ASSEMBLY

General Instructions

- Whenever grasping a tool or part in a vise, always use leather-covered or copper-covered vise jaws. Take extra care with threaded parts and housings.
- Always clean every part and wipe every steel part with a thin film of oil before installation.
- Apply a film of O-ring lubricant to all O-rings before final assembly.

MAINTENANCE SECTION

Assembly of the Isolator

1. Coat the Isolator Balls (16) with a solution of liquid soap and place one in each pocket of the Female Isolator (17).
2. Secure the Isolator (15) in leather-covered or copper-covered vise jaws. Install the assembled Female Isolator including Isolator Balls on the Male Isolator.
3. Secure the Nose Cap (18) with the Male Nose Cap Screw (19) using a suitable thread-locking compound and tighten to a torque of 29 ft-lb (40 Nm).

Assembly of the Barrel

WARNING

The press fit between the Barrel (33) and the Nozzle and Cushion Bushing (34) is heavy interference and a suitably guarded press should be used.

1. Press the Lower Inner Sleeve (37) onto the large, chamfered bore end of the Barrel. Secure in place with the Inner Sleeve Retaining Clip (38). Install the Retainer O-ring (42).
2. Press the Cushion Bushing into the Nozzle end of the Barrel (end with the large radius bore) until the Cushion Bushing has passed the groove where the Cushion Bushing Retaining Clip (35) fits.
3. Insert the Cushion Bushing Retaining Clip into the Nozzle end of the Barrel and seat the Clip into the groove in the Barrel.
4. Press the Cushion Bushing from the Valve end of the Barrel back down the bore until it seats on the Cushion Bushing Retaining Clip.

NOTICE

When installing a hexagon nozzle into the barrel, follow the instructions below.

For European ISO standard shanks:

Ensure that one of the flats of the hexagon is at 90 degrees to the axis of the Handle.

For U.S.A. standard shanks:

Ensure that one of the flats of the hexagon is parallel to the axis of the Handle. This will ensure that the cutting edge of a hexagon shank chisel will be parallel to the axis of the Handle. Since hexagon to cutting edge orientation can vary in local markets, it is best to take reference to a chisel which will be used in the tool.

5. Press the Nozzle into the Barrel, pilot diameter first.
6. Apply Loctite Nut Lock No. 242 to the thread of the Elbow on the Air Food Tube Assembly (23), screw it into the Barrel up to the shoulder and back it off until the Air Feed Tube is pointing vertically.

Assembly of the Muffler Cover

1. Insert the Outer Lower Bushing (40) into the Cover (39), thin section end first.
2. Press the Front End Cap (41) onto the Cover until the Cap snaps into position. This will secure the Outer Lower Bushing.

Assembly of the Inside Trigger Assembly

1. Put the Trigger (2) into the Handle (1) from the back. Use a 1/8" (3mm) dowel to align the hole in the Trigger (2) with the hole in the Handle. Drive the Trigger Pin (3) into the Handle (1) to an equal depth on either side of the Trigger.
2. Insert the Throttle Valve Plunger (4), Throttle Valve (6) with O-Ring (5) and Throttle Valve Spring (7) into the bore in the steel portion at the Handle.
3. Screw the Inlet Bushing (9) into the Handle.

Assembly of the Outside Trigger Assembly

1. Put the Intermediate Lever (64) into the Handle (65). Use a 1/8" (3 mm) dowel to align the hole in the Intermediate Lever with the hole in the Handle. Drive the Intermediate Lever Pin (66) into the Handle to an equal depth on either side of the Intermediate Lever.
2. Insert the Trigger (63) from the back of the Handle. Use the dowel to align the hole in the Trigger with the hole in the Handle. Drive the Trigger Pin (66) into the Handle to an equal depth on either side of the Intermediate Lever.
3. Insert the Throttle Valve Plunger (4), Throttle Valve (6) with O-ring (5) and Throttle Spring (7) into the bore in the steel portion at the Handle.
4. Screw the Inlet Bushing (9) into the Handle.

MAINTENANCE SECTION

Assembly of the T Handle

1. Put the Throttle Valve Lever (54) into the slot in the Handle (53). Use a 1/8" (3 mm) dowel to align the trigger pin hole with the hole in the Handle. Drive the one Pin (56) into the Handle to an equal depth on either side of the Throttle Valve Lever (54).
2. Drive the other Pin (56) into the Handle to an equal depth on either side of the Throttle Valve Lever.
3. Insert the Throttle Valve Plunger (57), Throttle Valve (6) with O-ring (5) and Throttle Valve Spring (58). Install a new O-ring (60) onto the Air Connection (59) and Fit the taper on the Air Connection Cap (61). Install a new O-ring (62) on the Air Connection Cap and screw the Air Connection Cap into the Handle.

Assembly of the Fronthead

1. Install the Plunger Spring (51) and Plunger (50) into the Fronthead (46).
2. Install the Latch (49) and using a suitable pin, depress the Plunger until the Latch (49) passes over the Plunger.

Assembly of the Tool

1. Grip the Barrel Assembly in leather-covered or copper-covered vise jaws and install the Piston (32) into the Barrel, small end first. Install the O-ring (28) into the O-Ring groove on the middle segment of the Valve Cap (29) and liberally coat with O-ring lubricant. Install the assembled Valve in the bottom of the Valve bore in the Barrel. Install the second O-ring (28) on top of the Assembly and coat with O-ring lube.
2. Place the Isolator Assembly on the Barrel Assembly, aligning the Air Feed Tube with the hole in the Isolator. Install the three Cap Screws (27) and tighten to 65 ft-lb (88 Nm) torque. Install the O-Ring (20) on the Isolator Assembly.

3. Install the Assembled Barrel and Isolator into the Cover Assembly and secure using the four Cap Screws (14) and Washers (11). Tighten the Cap Screws to 15 ft-lb (20 Nm) torque.
4. Install the Air Feed Bushing with O-Ring (21) onto the Air Feed Tube and seat it in the bore of the Isolator face. Fit the three Anti Rotation Pins (15A) into the Isolator Assembly (15).
5. Install the Handle Assembly, aligning the hole in the Handle with the Air Feed Tube. Secure the Handle Assembly using the Cap Screws (10). Tighten to 20 ft-lb (27 Nm) torque.

For Latch Fronthead Assembly

6. Screw the Fronthead into the Barrel (33) until you feel the Retainer O-ring (42) slip into the groove in the Fronthead.

NOTICE

To make sure that silicone sealer will stick and retain the Pin (48), clean the Pin and area in and around the fronthead hole using a suitable solution in a well-ventilated area.

7. Align the hole in the Fronthead with the slot in the Barrel and install the Pin (48).
8. Secure the Pin with fresh sealant to the top of the Pin only. Sealant around or beneath the pin will make later removal difficult.

For Screw-on Retainer

9. Screw Retainer (45) onto Barrel (33).

For Hitchcutter Retainer

10. Screw Hitchcutter Retainer (67) on to Barrel (33).

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE

Trouble	Probable Cause	Solution
Sluggish operation	Dirt or oil gum accumulation on internal parts	Pour about 3 cc of a clean, suitable, cleaning solution into the air inlet and operate for 30 seconds. After flushing, pour about 3 cc of oil into the air inlet and operate the tool for 5 seconds to coat the internal parts with oil.
Loss of power	Worn Valve	Replace the Valve.
	Insufficient air pressure	Check the air pressure at the tool inlet with the tool running. Adjust the air supply to maintain the recommended air pressure.
Loss of efficiency	Worn Piston and/or accessory	Replace Piston and or accessory.
Rapid wear of Retainer parts	Running tool with no pressure on the accessory	Do not operate the tool without pressing the accessory into the workpiece.
Erratic operation	Loose Cap Screws securing the Isolator to the Barrel Assembly	Use a suitable thread-locking compound and tighten Cap Screws to 65 ft-lb (88 Nm) torque.
Freezing at exhaust ports	Excessive moisture in air supply line	Install moisture traps in the air supply line or add anti-freeze lubricant directly through the air inlet.

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

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.