

SERIES GR03A ANGLE BELT SANDERS

NOTICE

Series GR03A Angle Belt Sanders are designed for work in the metal fabricating industry and foundry applications. These small Angle Belt Sanders are very efficient at grinding weld bead, slag and parting lines while leaving a fine finish.

ARO is not responsible for customer modification of tools for applications on which ARO 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 5/16" (8 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 rotate 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 ARO.
- Whenever the Angle Head is installed or repositioned, the Throttle Lever must be positioned so that reaction torque will not tend to retain the throttle in the "ON" position.
- 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 ARO 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 ARO Authorized Servicenter.

For parts and service information, contact your local ARO distributor, or the Customer Service Dept. of the Ingersoll-Rand Distribution Center, White House, TN at PH: (615) 672-0321, FAX: (615) 672-0801.









ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North • P.O. Box 8000 • Southern Pines, NC 28388-8000
©1998 INGERSOLL-RAND COMPANY • PRINTED IN U.S.A.

▲ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

	▲ WARNING Always wear eye protection when operating or performing maintenance on this tool.		▲ WARNING Always wear hearing protection when operating this tool.		▲ 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.
	▲ WARNING 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.		▲ WARNING Do not carry the tool by the hose.		▲ WARNING Do not use damaged, frayed or deteriorated air hoses and fittings.
	▲ WARNING Keep body stance balanced and firm. Do not overreach when operating this tool.		▲ WARNING Operate at 90 psig (6.2 bar/620 kPa) Maximum air pressure.		

SANDER SPECIFIC WARNINGS

▲ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- Do not use this tool if actual free speed exceeds the nameplate rpm.
- Before mounting a sanding belt, after any tool repair or whenever a Sander is issued for use, check free speed of the tool with a tachometer to make certain its actual speed at 90 psig (6.2 bar/620 kPa) does not exceed rpm stamped or printed on the nameplate. Sanders in use on the job must be similarly checked at least once each shift.
- Always use the recommended ARO Guard furnished with the Sander.
- Do not operate a Belt Sander with the Cover removed.

ADJUSTMENTS

— INSTALLING A SANDING BELT —

When installing a new sanding belt, proceed as follows:

1. For 18" models, slide the Cover rearward toward the handle of the Sander until it is free. It may require a light rap on the front edge of the Cover to disengage it from its locking points.
2. Compress the Idler Wheel and slip the old belt off the drive Sleeve. Release the pressure on the Idler Wheel and remove the belt.
3. Position a new belt on the Idler Wheel.
4. Compress the Idler Wheel with the belt and slip the opposite end of the belt onto the Drive Sleeve around the Spindle Cap. Release the pressure on the Idler Wheel.
5. For 18" models, align the Cover with the Guard and slide it forward toward the Idler Wheel until it snaps into position and stays there.
6. Operate the Sander at low speed to determine if the new Belt is tracking properly. If the Belt fails to track properly, realign the Clevis by tightening or loosening one or both of the Clevis Mounting Screws.

TOOL OPERATION

Sand using any portion of the exposed Sanding Belt. For best results, sand on that portion of the Belt being pulled by the Drive Wheel.

LUBRICATION



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

Always use an air line lubricator with these tools. We recommend the following Filter-Lubricator-Regulator Unit:

For USA - IRAX No. C22-04-600

After each two hours of operation, if an air line lubricator is not used, inject 1/2 to 1 cc of IRAX No. 10P Oil into the Air Inlet.

After each eight hours of operation, inject approximately 1/2 cc of IRAX No. 67 1LB or IRAX No. 77 1LB Grease into the Angle Head Grease Fitting. Excessive lubrication will cause grease to work out around the Arbor.

Whenever a new Wick is installed, thoroughly saturate the Wick with approximately 1-1/2 cc of IRAX No. 63Z4 Oil.

Do not substitute any other oil.

Whenever the motor is disassembled, remove the old grease and refill the cavity behind the Rear Rotor Bearing with 3/4 cc of IRAX No. 68-1LB Grease.

CAUTION

Do not mark nonmetallic surface of this tool with customer identification codes. Such action could affect tool performance.

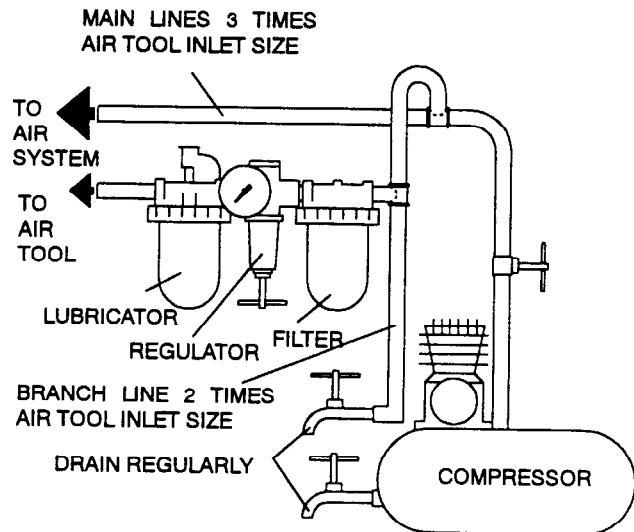
INSTALLATION

Air Supply and Connections

Always use clean, dry air at 90 psig. maximum air pressure. 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 Dwg. TPD905-1 for a typical piping arrangement.



(Dwg. TPD905-1)

HOW TO ORDER SERIES GR03A ANGLE BELT SANDERS

ANGLE BELT SANDERS WITH 12" x 1/2" BELT		
Model	Arbor Speed rpm	Belt Speed sfpm
GR03A-20RB-3 (Rear Exhaust)	20 000	4 500
GR03A-12RB-3 (Rear Exhaust)	12 000	2 700
ANGLE BELT SANDERS WITH 18" x 1/4" BELT		
GR03A-20RB-5 (Rear Exhaust)	20 000	4 500
GR03A-12RB-5 (Rear Exhaust)	12 000	2 700
ANGLE BELT SANDERS WITH 18" x 1/2" BELT		
GR03A-20RB-4 (Rear Exhaust)	20 000	4 500
GR03A-12RB-4 (Rear Exhaust)	12 000	2 700

NOTICE

Any model listed can be changed to a front exhaust tool by reversing the Flow Ring and aligning the indicator marks with the letter "F" on the Housing. To order a front exhaust tool from the factory, substitute the letter "F" for the letter "R" in the model number. Example: GH03A-20RB-3Rear Exhaust Model becomes GH03A-20FB-3 Front Exhaust Model.

HOW TO ORDER CUSTOM MODELS

1. To order a tool with a Locking Lever, select the desired model and add an "-L" to the end of the existing number.
Example: GH03A-20B-3-L
2. To order a tool with a Low-Profile Concentric Flange, select the desired model and add a "-C" to the end of the existing number.
Example: GR03A-20B-3-C
3. To order a tool with a Low-Profile Concentric Flange, select the desired model and add a "-P" to the end of the existing number.
Example: GR03A-20B-3-P

NOTICE

To order a combination of options, add the required letters to the end of the model number in the following order: L or C, P, D.

Example: GR03A-20B-3-CPD
GR03A-20B-3-LP

NOTICE

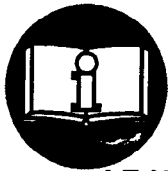
Anytime a tool is ordered with a Low-Profile Concentric Flange, it will come equipped with a Locking Lever from the factory.

PONCEUSES D'ANGLE À BANDE DE LA SÉRIE GR03A

NOTE

Les ponçuses d'angle à bande de la Série GR03A sont destinées aux applications de tôlerie et de fonderie. Ces petites ponçuses à bande sont particulièrement bien adaptées au polissage des cordons de soudure, du laitier et des jointures de moulage et laissent une très bonne finition. ARO 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 ARO.

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 8 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 gasol 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 rotation 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 ARO.
- A chaque fois que le renvoi d'angle est installé ou repositionné, le levier de commande doit être positionné de manière à ce que le couple de réaction n'ait pas tendance à maintenir le levier de commande en position "MARCHE".
- 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 ARO 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 ARO Tool Products le plus proche.

Pour les informations relatives aux pièces et au service, contactez votre distributeur ARO.

ARO Tool Products

Ingersoll-Rand Company









1725 U.S. No. 1 North, PO Box 8000, Southern Pines, NC 28388-8000

©1998 INGERSOLL-RAND COMPANY Imprimé aux E.U.

SIGNIFICATION DES ÉTIQUETTES D'AVERTISSEMENT

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

	ATTENTION Porter toujours des lunettes de protection pendant l'utilisation et l'entretien de cet outil.
	ATTENTION Porter toujours une protection acoustique pendant l'utilisation de cet outil.
	ATTENTION 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.
	ATTENTION 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'outil en cas d'inconfort, de picotements ou de douleurs. Consulter un médecin avant de recommencer à utiliser l'outil.
	ATTENTION Ne pas transporter l'outil par son flexible.
	ATTENTION Utiliser de l'air comprimé à une pression maximum de 6,2 bar (620 kPa).
	ATTENTION Garder une position équilibrée et ferme. Ne pas se pencher trop en avant pendant l'utilisation de cet outil.
	ATTENTION Ne pas utiliser des flexibles ou des raccords endommagés, effilochés ou détériorés.

AVERTISSEMENTS SPÉCIFIQUES AUX PONCEUSES

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

- Ne pas utiliser cet outil si la vitesse à vide réelle dépasse celle indiquée sur la plaque signalétique.
- Avant de monter une bande de ponçage, après toute réparation de l'outil ou chaque fois que la ponceuse est sortie du magasin, vérifier la vitesse à vide de l'outil avec un compte-tours pour s'assurer qu'à une pression d'alimentation de 6,2 bar (620 kPa), elle ne dépasse pas celle poinçonnée ou imprimée sur la plaque signalétique. Les ponceuses sorties sur chantier doivent être vérifiées de la même façon au moins une fois par poste.
- Utiliser toujours la ponceuse équipée du carter de protection recommandé par ARO.
- Ne jamais exploiter la ponceuse lorsque le couvercle est déposé.

RÉGLAGES

— MONTAGE DE LA BANDE ABRASIVE —

Pour installer une nouvelle bande abrasive, procéder comme suit :

1. Pour les modèles de 18", glisser le couvercle vers l'arrière en direction de la poignée, jusqu'à ce qu'il soit libre. Un léger coup sur le devant du couvercle pourra être nécessaire pour le désengager de ses points de verrouillage.
2. Comprimer la roue libre et faire glisser l'ancienne bande du manchon d'entraînement. Relâcher la pression sur la roue libre et déposer la bande.
3. Placer une bande neuve sur la roue libre.
4. Comprimer la roue libre et la bande et faire glisser l'extrémité opposée de la bande sur le manchon d'entraînement autour du chapeau de broche. Relâcher la pression sur la roue libre.
5. Pour les modèles de 18", aligner le couvercle et le carter de protection et glisser le couvercle vers la roue libre jusqu'à ce qu'il s'engage en position.
6. Faire tourner la ponceuse à basse vitesse pour vérifier l'alignement correct de la bande. Si la bande n'est pas alignée, ajuster la chape en serrant ou en desserrant une ou les deux vis de montage de chape.

MISE EN SERVICE DE L'OUTIL

EXPLOITATION DE L'OUTIL

Poncer en utilisant n'importe quelle section exposée de la bande de ponçage. Pour obtenir les meilleurs résultats, utiliser la partie de la bande tractée par la roue d'entraînement.

LUBRIFICATION



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

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

International - IRAX No. C26-C4-A29

Toutes les deux heures de fonctionnement, si un lubrificateur de ligne n'est pas utilisé, injecter 1/2 à 1 cm³ d'huile IRAX No. 10P dans le raccord d'admission.

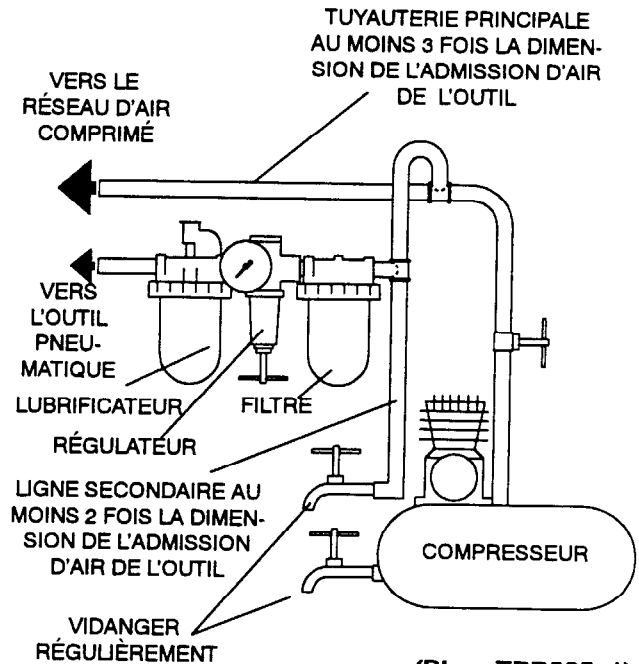
Toutes les huit heures de fonctionnement, injecter 1 cm³ de graisse IRAX No. 67 1LB ou IRAX No. 77 1LB dans le raccord de graissage du renvoi d'angle. **Tout graissage excessif causera l'extrusion de la graisse autour de l'arbre.**

A chaque fois qu'un nouveau feutre graisseur est installé, le saturer avec environ 1,5 cm³ d'huile IRAX No. 63Z4. **Ne pas utiliser d'autre huile.**

A chaque fois que le moteur est démonté, enlever la vieille graisse et remplir la cavité derrière le roulement arrière de rotor avec 0,75 cm³ d'huile IRAX No. 68 1LB.

AVERTISSEMENT

Ne pas marquer les codes d'identification client sur les surfaces non métalliques de cet outil. De telles actions pourraient affecter les performances de l'outil.



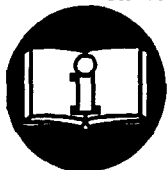
(Plan TPD905-1)

LIJADORAS DE CORREA ANGULARES DE LA SERIE GR03A

NOTA

Las lijadoras de correa de la serie GR03A están diseñadas para trabajos en la industria de fabricación de productos metálicos y en aplicaciones de fundición. Estas pequeñas lijadoras de correa angulares resultan muy eficaces para amolar cordones de soldadura, líneas de rebabas y escoria, obteniendo un acabado fino.

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



▲ 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 8 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.

NOTA

El uso de piezas de recambio que no sean las auténticas piezas ARO 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 ARO Tool Products más próximo.

Pour les informations relatives aux pièces et au service, contactez votre distributeur ARO.

ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North, PO Box 8000, Southern Pines, NC 28388-8000

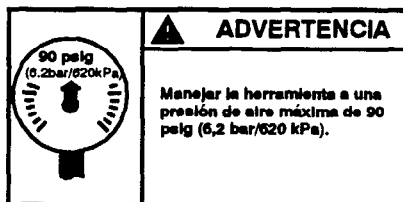
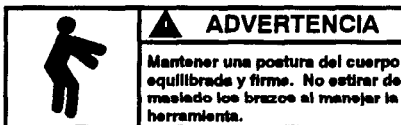
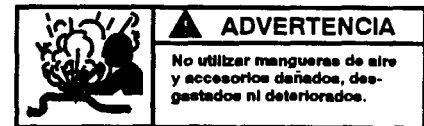
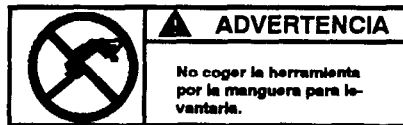
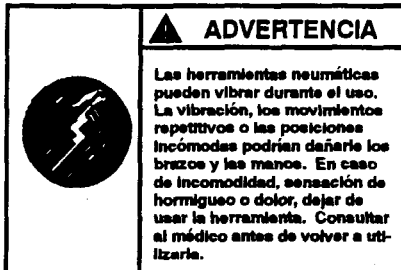
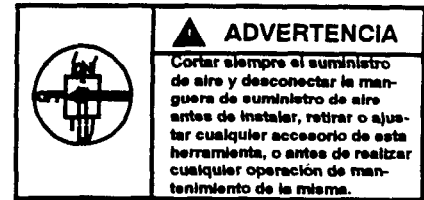
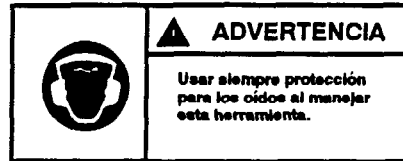
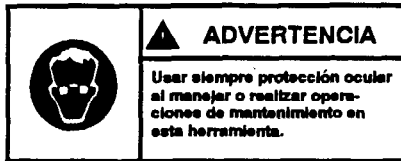
©1998 INGERSOLL-RAND COMPANY Impreso en EE.UU.

ARO

ETIQUETAS DE AVISO

⚠ AVISO

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



AVISOS ESPECÍFICOS SOBRE LAS LIJADORAS

⚠ AVISO

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

- No use esta herramienta si la velocidad en vacío real excede la indicada en la placa de identificación.
- Antes de montar una correa de lijado, después cualquier reparación de la herramienta o al poner en servicio una lijadora, compruebe con un tacómetro la velocidad en vacío de la herramienta para asegurarse de que su velocidad real a 90 psig (6,2 bar/620 kPa) no exceda la velocidad estampada o impresa en la placa de identificación. Las lijadoras que están en uso también se deberán revisar al menos una vez en cada turno de trabajo.
- Use siempre el protector recomendado por ARO y suministrado con la lijadora.
- No utilice la lijadora de correa sin la cubierta.

AJUSTES

-INSTALACIÓN DE UNA CORREA DE LIJADO

Para instalar una correa de lijado nueva, proceda como sigue:

1. Para modelos de 18 pulg., deslice la cubierta hacia atrás, hacia la empuñadura de la lijadora, hasta que quede suelta. Puede que sea necesario golpear ligeramente el extremo delantero de la cubierta para soltarla de los puntos de cierre.
2. Comprima la rueda intermedia y deslice la correa antigua fuera del manguito de accionamiento. Libere la presión de la rueda intermedia y saque la correa.
3. Coloque una correa nueva en la rueda intermedia.
4. Comprima la rueda intermedia con la correa y deslice el extremo opuesto de dicha correa sobre el manguito de accionamiento, alrededor de la tapa del husillo. Libere la presión sobre la rueda intermedia.
5. Para modelos de 18 pulg., alinee la cubierta con el protector y deslícela hacia delante, hacia la rueda intermedia, hasta que salte a su posición y se quede allí.
6. Utilice la lijadora a baja velocidad para ver si la correa nueva funciona con normalidad. Si la correa no funciona debidamente, vuelva a alinear la horquilla apretando o aflojando para ello uno de los tornillos de montaje de la horquilla o ambos.

PARA PONER LA HERRAMIENTA EN SERVICIO

FUNCIONAMIENTO DE LA HERRAMIENTA

Proceda al lijado utilizando para ello cualquier parte de la correa de lijado que quede expuesta. Para obtener unos resultados óptimos, lije utilizando la parte de la correa de la que tira la muela de accionamiento.

LUBRICACIÓN



IRAX Nº 10P
IRAX Nº 50P
IRAX Nº 63Z4



IRAX Nº 67 1LB
IRAX Nº 68 1LB
IRAX Nº 77 1LB

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

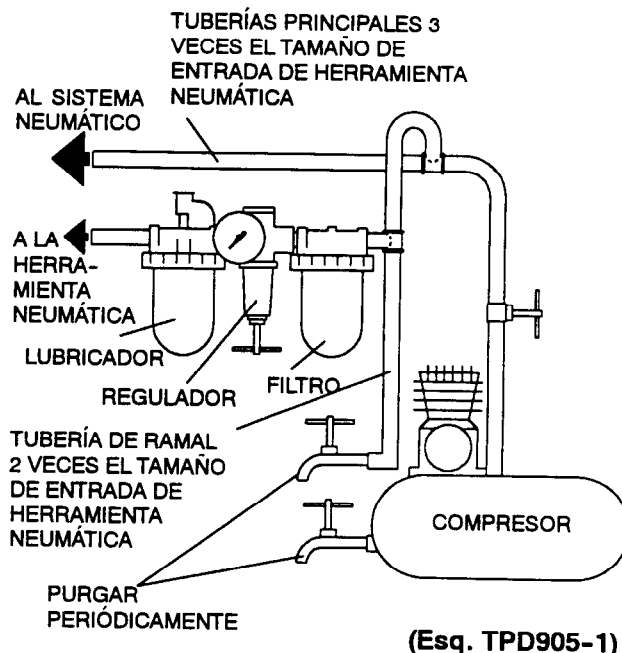
Internacional - IRAX Nº C26-C4-A29

Después de cada dos horas de funcionamiento, si no se usa un lubricador de línea de aire comprimido, inyecte 1/2 - 1 cc de aceite IRAX Nº 10P en la admisión de aire. Después de cada ocho horas de uso, inyecte aproximadamente 1/2 cc de grasa IRAX Nº 67 1LB o 77 1LB en el engrasador situado en la cabeza angular. Un exceso de lubricación causará que caiga grasa en el eje. Siempre que se instale una mecha nueva, satúrela bien con 1-1/2 cc de aceite IRAX Nº 63Z4. No sustituya con ningún otro aceite.

Siempre que se desmonte el motor, saque la grasa usada y vuelva a llenar la cavidad situada detrás del rodamiento del rotor trasero con 3/4 cc de grasa IRAX Nº 68 1LB.

PRECAUCIÓN

No marque ninguna superficie no metálica de esta herramienta con los códigos de identificación de cliente. Tal acción podría afectar al rendimiento de la herramienta.



LIXADORES COM CORREIA EM ÂNGULO SÉRIES GR03A

AVISO

Os Lixadores com Correia em Ângulo Séries GR03A são concebidos para aplicações de trabalho em indústria e fundição de metais. Estes pequenos Lixadores são muito eficientes em esmerilar cordões de solda, e linhas de separação e madeira, deixando um fino acabamento.

A ARO não é responsável por modificações, feitas pelo cliente em ferramentas, nas quais a ARO não tenha sido consultada.



▲ ADVERTÊNCIA

**INFORMAÇÃO DE SEGURANÇA IMPORTANTE EM ANEXO.
LEIA ESTE MANUAL ANTES DE OPERAR A FERRAMENTA.
É DA RESPONSABILIDADE DO EMPREGADOR COLOCAR A INFORMAÇÃO
DESTE MANUAL NAS MÃOS DO OPERADOR.**

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

- 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, máximo desempenho e máxima durabilidade das peças, opere esta ferramenta com uma pressão de ar máxima de 6,2 bar/620 kPa (90 psig) na entrada da mangueira de alimentação de ar com diâmetro interno de 8 mm (5/16”).
- Desligue sempre a alimentação de ar e desconecte a mangueira de alimentação de ar antes de instalar, remover ou ajustar qualquer acessório nesta ferramenta, ou antes de executar qualquer serviço de manutenção nesta ferramenta.
- Não use mangueiras de ar ou adaptadores danificados, gastos ou deteriorados.
- Certifique-se de que todas as mangueiras e adaptadores sejam do tamanho correcto e estejam apertados com firmeza. Veja o Desenho TPD905-1 para um arranjo típico de tubagem.
- Use sempre ar seco e limpo com pressão máxima de 90 psig. Pó, fumos corrosivos e/ou humidade excessiva podem arruinar o motor de uma ferramenta pneumática.
- Não lubrifique as ferramentas com líquidos inflamáveis ou voláteis tais como querosene, diesel ou combustível de jactos.
- Não remova nenhum rótulo. Reponha qualquer rótulo danificado.

USANDO A FERRAMENTA

- Use sempre óculos de protecção quando estiver operando ou executando serviço de manutenção nesta ferramenta.
- Use sempre protecção contra ruído ao operar esta ferramenta.
- Mantenha as mãos, partes do vestuário soltas e cabelos compridos afastados da extremidade em rotação.
- Antecipe e esteja alerta a mudanças repentinas no movimento quando ligar e operar qualquer ferramenta motorizada.
- Mantenha a posição do corpo equilibrada e firme. Não exagere quando operar esta ferramenta. Torques de reacção elevados podem ocorrer na ou abaixo da pressão de ar recomendada.
- Os acessórios da ferramenta podem continuar a impactar brevemente após a pressão ter sido aliviada.
- Ferramentas accionadas pneumáticamente podem vibrar em uso. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser prejudiciais às mãos e aos braços. Pare de usar a ferramenta caso ocorra algum desconforto, sensação de formigamento ou dor. Procure assistência médica antes de retornar ao trabalho.
- Use acessórios recomendados pela ARO.
- Quando quer que o Cabeçote em Ângulo seja instalado ou repostado, a Válvula Reguladora de Pressão deve ser posicionada de modo que um torque de reacção não tenderá a reter o curso na posição “LIGADA”.
- Esta Ferramenta não foi concebida para trabalhos em atmosferas explosivas.
- Esta Ferramenta não está isolada contra choques eléctricos.

AVISO

O uso de peças de substituição que não sejam genuinamente da ARO podem resultar em riscos de segurança, diminuição do desempenho da ferramenta, aumento da necessidade de manutenção e pode invalidar todas as garantias.

As reparações devem ser feitas somente por pessoal treinado autorizado. Consulte o Centro de Serviços da ARO Tool Products mais próximo.

Para obter informações sobre peças e assistência, contacte o seu distribuidor local ARO.

ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North, PO Box 8000, Southern Pines, NC 28388-8000


1998 INGERSOLL-RAND COMPANY Impresso nos E.U.A.


ARO


IDENTIFICAÇÃO DO RÓTULO DE ADVERTÊNCIA


▲ ADVERTÊNCIA


O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

	▲ ADVERTÊNCIA Use sempre óculos de protecção quando estiver operando ou executando algum serviço de manutenção nesta ferramenta.
---	--


	▲ ADVERTÊNCIA Use sempre protecção contra o ruído ao operar esta ferramenta.
---	--


	▲ ADVERTÊNCIA Desligue sempre a alimentação de ar e desconecte a mangueira de alimentação de ar antes de instalar, remover ou ajustar qualquer acessório nesta ferramenta, ou antes de executar algum serviço de manutenção nesta ferramenta.
---	---

	▲ ADVERTÊNCIA Ferramentas accionadas pneumáticamente podem vibrar em uso. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser prejudiciais às mãos e aos braços. Pare de usar a ferramenta caso ocorra algum desconforto, sensação de formigamento ou dor. Procure assistência médica antes de retornar ao trabalho.
---	---

	▲ ADVERTÊNCIA Não carregue a ferramenta segurando na mangueira.
---	---

	▲ ADVERTÊNCIA Não use mangueiras de ar ou adaptadores danificados, gastos ou deteriorados.
---	--

	▲ ADVERTÊNCIA Mantenha a posição do corpo equilibrada e firme. Não exagere quando operar esta ferramenta. Torques de reacção elevados podem ocorrer sob a pressão de ar recomendada.
---	--

	▲ ADVERTÊNCIA Opere com pressão do ar Máxima de 90 psig (6,2-6,9 bar).
---	--

ADVERTÊNCIAS ESPECÍFICAS SOBRE O LIXADOR

▲ ADVERTÊNCIA

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

- Não use esta ferramenta se a velocidade livre total exceder a rpm indicada na placa de identificação.
- Antes de montar a correia de lixamento, depois de qualquer reparação de ferramenta ou quando se pretende que um Lixador seja colocado em funcionamento, verifique a velocidade livre do Lixador com um tacómetro para se certificar de que a sua velocidade real a 6,2 bar/620kPa (90 psig) não exceda a rpm selada ou impressa na placa de identificação. Os Lixadores em funcionamento devem ser similarmente verificados pelo menos uma vez em cada turno.
- Use sempre o Protector do Disco da ARO fornecido com o Lixador.
- Não opere o lixador com correia com a capa removida.

AJUSTES

— INSTALANDO UMA CORREIA DE LIXAMENTO —

Quando uma correia de lixamento nova for instalada proceda da seguinte maneira:

1. Para modelos com 18", deslize a Capa para trás em direção ao punho do Lixador até libertá-la. Pode ser necessário uma leve pancada na extremidade frontal da capa para livrá-lo dos seus pontos de travamento.
2. Comprima o Disco Falso e retire a correia velha para fora da Camisa de comando. Alivie a pressão no Disco Falso e remova a correia.
3. Posicione a correia nova no Disco Falso.
4. Comprima o Disco Falso com a correia e coloque a extremidade oposta da correia na Camisa de Comando ao redor do Tampo do Fuso. Alivie a pressão no Disco Falso.
5. Para modelos com 18", alinhe a Capa com o Protector e deslize para frente em direção do Disco Falso até que ele prenda na posição e lá permaneça.
6. Opere o Lixador com velocidade baixa para verificar se a nova Correia está propriamente colocada. Se a Correia não correr no trilho de maneira apropriada, realinhe o Olhal ao apertar ou afrouxar um ou ambos Parafusos de Montagem do Olhal.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

— OPERAÇÃO DA FERRAMENTA —

Lixe usando qualquer porção da Correia de Lixamento exposta. Para resultados melhores, lixe naquela porção da Correia sendo puxada pelo Disco de Comando.

— LUBRIFICAÇÃO —



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

Use sempre um lubrificador de ar de linha com estas ferramentas. Nós recomendamos a seguinte Unidade Filtro-Lubrificador-Regulador:

Para Internacional - IRAX No. C26-C4-A29

Depois de cada duas horas de operação, se um lubrificador de ar de linha não estiver sendo usado, injecte de 1/2 a 1 cc de Óleo IRAX No. 10P na Entrada de Ar.

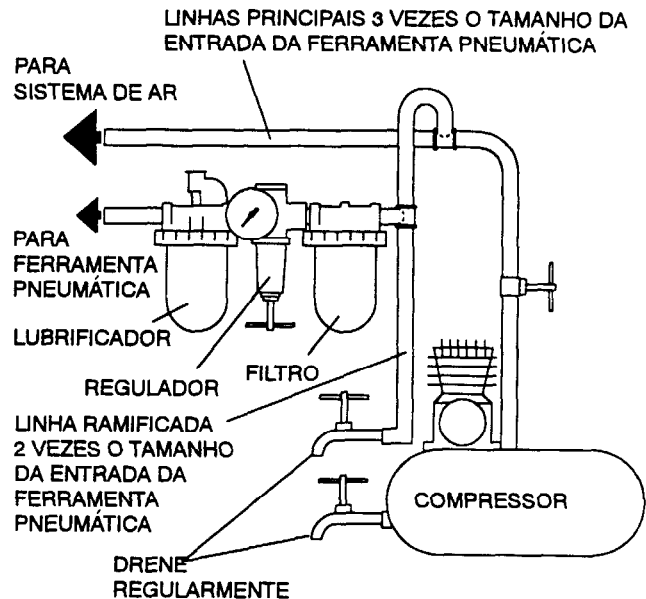
Depois de cada oito horas de operação, injecte cerca de 1/2 cc de Massa ARO Tool No 67 1LB ou ARO Tool No 77 1LB no Adaptador de Massa do Cabeçote em Ângulo. Lubrificação excessiva poderá fazer com que a graxa de espalhe em volta da Árvore de Montagem.

Quando quiser instalar uma nova linha de lubrificação, sature por inteiro a existente com cerca de 1-1/2 cc de Óleo IRAX No. 63Z4. Não substitua por qualquer outro óleo.

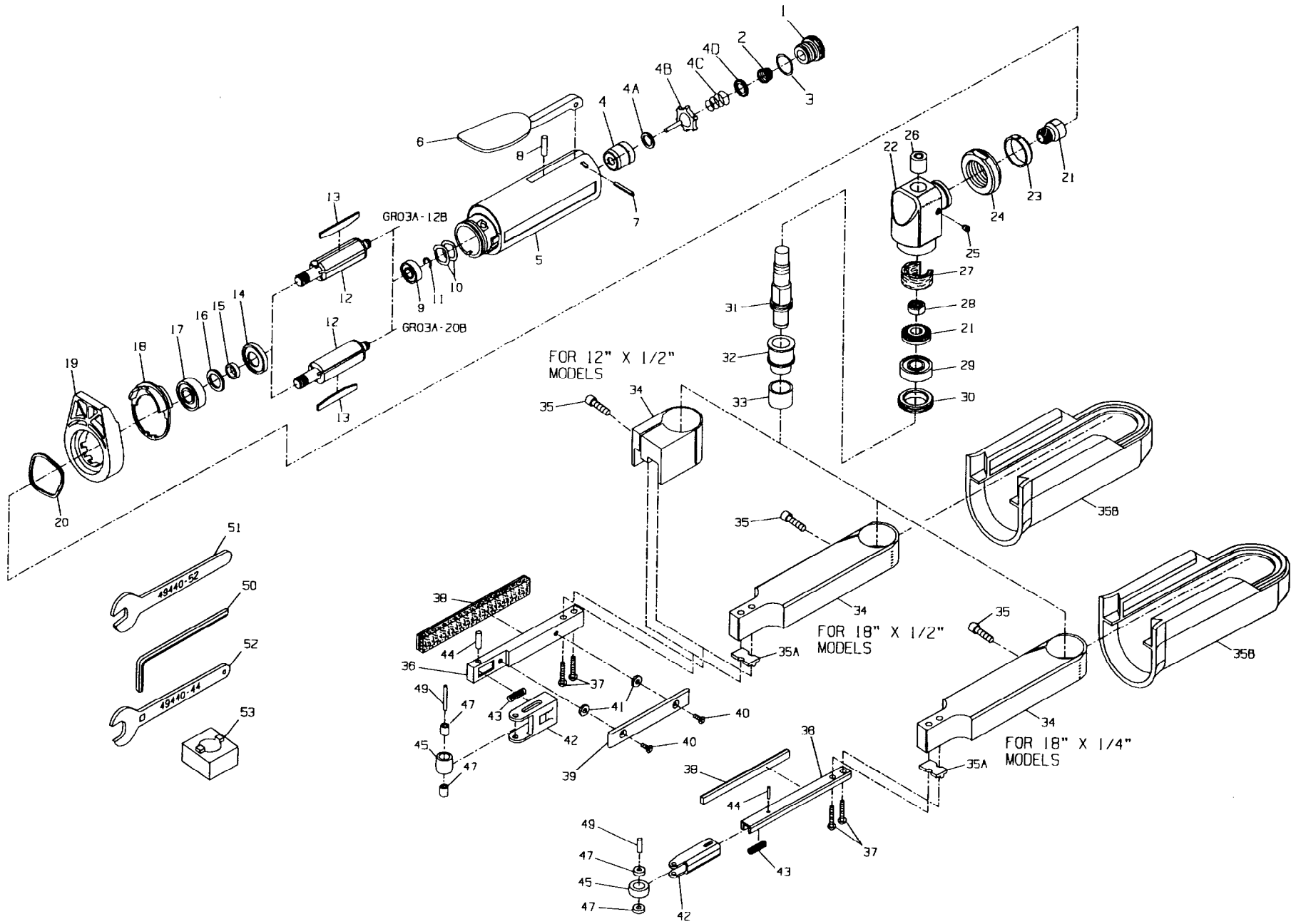
Quando quiser que o motor seja desmontado, remova a massa anterior e encha a cavidade atrás do Mancal do Rotor Traseiro com 3/4 cc de Massa IRAX No. 68 1LB.

CUIDADO

Não marque as superfícies não metálicas desta ferramenta com códigos de identificação do cliente. Tais acções podem afectar o desempenho da ferramenta.



(Desenho TPD905-1)



PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Inlet Assembly	LG1-A465A	17	Front Rotor Bearing	LG1-24
2	Inlet Screen	R1602-61	18	Flow Ring	
• 3	Inlet Seal	85H-167		for GR03A-12 (brown)	LG1-103-1
	Throttle Valve Kit	LG1-K300		for GR03A-20 (red)	LG1-103-3
4	Throttle Valve Cartridge Case	LG1-300A	19	High Profile Flange	LG1-23
4A	Throttle Valve Seat	LG1-303	# ♦ 19A	Low Profile Concentric Flange (for all models ending in C)	LG1R-23
4B	Throttle Valve	AG210-302	20	Flange Clamp	LG1-29
4C	Throttle Valve Spring	7L-51	21	Bevel Pinion and Bevel Gear (sold only as a matched set)	
4D	Throttle Valve Spring Seat	LG1-592		for GR03A-12	LA1-A552-2.0S
5	Motor Housing	ALG1-40		for GR03A-20	LA1-A552-1.5
6	Throttle Lever	ALG1-273	22	Angle Housing Assembly	LA1-A550S
▪ 6A	Locking Throttle Lever Assembly	LG1-A400	23	Clamp Spacer	LA1-46
*	Lever Lock	LG1-402	24	Clamp Nut	LG1-27
*	Lock Spring	LG1-405	25	Grease Fitting	D0F9-879
*	Lock Pin	5UT-757	26	Upper Arbor Bearing	AG210-693
7	Throttle Lever Pin	61H-120	27	Wick	
8	Throttle Valve Plunger	LG1-191		for GR03A-12	LA1-560
9	Rear Rotor Bearing	DG230-22		for GR03A-20	LA-561
• 10	Rear Rotor Bearing Spacer (2)	DG20-278	28	Bevel Gear Nut	AG210-578A
• 11	Rear Rotor Bearing Retainer	LG1-118	29	Lower Arbor Bearing	AG210-24
12	Rotor		30	Arbor Bearing Cap	AG210-531
	for GR03A-12 (5 vane slots)	LG1-53-5	31	Arbor	AG210-4-G4
	for GR03A-20 (3 vane slots)	LG1-53-3	*	Warning Label	
• 13	Vane Packet (set of 5 Vanes)	LG1-42-5		for models ending in -EU	EU-99
14	Front End Plate	LG1-11		for all other models	ALG1-99
15	Front End Plate Spacer	DG10-65-5			
• 16	Front Seal Cup	LG1-32			

* 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.

▪ Included with models that have a "-L" in the suffix.

♦ Included with models that have a "-C" in the suffix.

▲ WARNING

Always install a Locking Throttle Lever Assembly (6A) on a tool with a Low Profile Concentric Flange (19A). Installing a Concentric Flange on a tool without a Locking Throttle Lever will allow the tool to continue running if the tool is dropped or set down on the standard non-locking Throttle Lever (6).

+ The LA1-A550S Angle Housing Assembly is furnished with two Wicks. Use Wick (LA1-561) with the notch on GR03A models.

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

* Nameplate		39	Belt Plate (for 12" x 1/2" and 18" x 1/2" models only)	LG1-360
for GR03A-12 models ending in -EU	ALA112-EU-301			
for all other GR03A-12 models	ALA112-301	40	Belt Plate Retaining Screw (for 12" x 1/2" and 18" x 1/2" models only) (2)	105588
for GR03A-20 models ending in -EU	ALA120-EU-301			
for all other GR03A-20 models	ALA120-301	41	Belt Plate Spacer (for 12" x 1/2" and 18" x 1/2" models only) (2)	LG1-361A
Belt Sander Assembly		42	Yoke	
for 12" x 1/2" models	LG1-A350-812		for 12" x 1/2" and 18" x 1/2" models	LG1-354A
for 18" x 1/2" models	LG1-A350-818		for 18" x 1/4" models	LG1-354-18-1/4
for 18" x 1/4" models	LG1-A350-418			
32 Spindle Cap	LG1-362	43	Yoke Spring	LG1-355
33 Drive Sleeve	LG1-358	44	Yoke Retaining Pin	
34 Guard			for 12" x 1/2" and 18" x 1/2" models	D92-152
for 12" models	LG1-357		for 18" x 1/4" models	9DF5846-667
for 18" models	LG1-901			
35 Guard Clamp Screw	SRA010A1-68	45	Idler Wheel Assembly	
35A Alignment Block (for 18" models only)	LG1-902		for 12" x 1/2" and 18" x 1/2" models	LG1-A352A
35B Cover (for 18" models only)	LG1-900		for 18" x 1/4" models	LG1-A352-18-1/4
36 Clevis Assembly		47	Idler Wheel Bearing (2)	
for 12" x 1/2" and 18" x 1/2" models	LG1-A351A		for 12" x 1/2" and 18" x 1/2" models	7AH-500
for 18" x 1/4" models	LG1-A351-18-1/4		for 18" x 1/4" models	LG1-365
* Belt Speed Label	LA1-98	49	Idler Wheel Shaft	
37 Clevis Mounting Screw (2)			for 12" x 1/2" and 18" x 1/2" models	R31-121
for 12" x 1/2" and 18" x 1/4" models	LG1-634		for 18" x 1/4" models	LG1-366
for 18" x 1/2" models	LG1-903	50	Guard Clamp Screw	
38 Belt Pad			Wrench (5/32" hex)	4U-478
for 12" x 1/2" and 18" x 1/2" models	LG1-363			
for 18" x 1/4" models	LG1-364			

* Not illustrated.

PART NUMBER FOR ORDERING 

PART NUMBER FOR ORDERING 

*	Sanding Belt Pack (includes 10 belts)				
	for 12" x 1/2" models				
	60 Grit	LG1-SB812-60-10	51	Collet Body Wrench(7/16")	125C-69
	80 Grit	LG1-SB812-80-10	52	Clamp Nut Wrench	LA1-253
	100 Grit	LG1-SB812-100-10	53	Arbor Bearing Cap Wrench	AG210-29
	for 18" x 1/2" models				
	60 Grit	LG1-SB818-60-10	* ⊗ *	Variable Speed Control Assembly (with piped away exhaust)	LG1-A1015
	80 Grit	LG1-SB818-80-10		Piped Away Exhaust Kit	LG1-K284
	100 Grit	LG1-SB818-100-10			
	for 18" x 1/4" models				
	60 Grit	LG1-SB418-60-10			
	80 Grit	LG1-SB418-80-10			
	100 Grit	LG1-SB418-100-10			

* Not illustrated.

⊗ Included with models that have a "-P" in the suffix.

NOTICE

By design, front exhaust models also exhaust some air out of the rear of the tool. Piped-away exhaust should be requested and containment of rear exhaust air is required.

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.

DISASSEMBLY

General Instructions

1. Do not disassemble the tool any further than necessary to replace or repair damaged parts.
2. When grasping a tool or part in a vise, always use the surface of the part or tool 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.
5. Do not press any needle bearing from a part unless you have a new needle bearing on hand for installation. Needle bearings are always damaged during the removal process.

Disassembly of the Sanding Arm

1. For 18" models, slide the Cover (35B) rearward toward the handle of the Sander until it is free. It may require a light rap on the front edge of the Cover to disengage it from its locking points.
2. Using the Guard Clamp Screw Wrench (50), loosen the Guard Clamp Screw (35) and remove the Guard (34) and assembled sanding arm from the Angle Housing (22).
3. Using a screwdriver, remove the two Clevis Mounting Screws (37) and separate the Clevis (36) from the Guard.
4. For 12" x 1/2" and 18" x 1/2" models, use a screwdriver, to remove the two Belt Plate Retaining Screws (40), two Belt Plate Spacers (41) and the Belt Plate (39).
5. If the Belt Pad (38) must be replaced, peel the Pad from the side of the Clevis or Yoke (42) and scrape the surfaces clean.
6. To separate the Yoke from the Clevis, press the Yoke Retaining Pin (44) out of the Yoke and Clevis with an arbor press.

WARNING

Be careful not to allow the compression of the Yoke Spring (43) to expel the Yoke or Clevis in an unsafe manner when the pressing plug is withdrawn from the Yoke.

7. Press the Idler Wheel Shaft (49) out of the Yoke and Idler Wheel (45).
8. The Idler Wheel contains an Idler Wheel Bearing (47) at each end. Simultaneously press both Bearings out of the Wheel.

Disassembly of the Angle Head

1. Grasp the tool in leather-covered or copper-covered vise jaws with the Spindle Cap (32) upward. Using the Collet Body Wrench (50) on the flats of the Arbor (31), unscrew the Spindle Cap. If the Drive Sleeve (33) needs replacement, cut the old one from the Spindle Cap.
2. Using the Arbor Bearing Cap Wrench (53), unscrew and remove the Arbor Bearing Cap (30). This is a left-hand thread. Rotate the Cap Wrench clockwise to remove the Cap.
3. Using the Clamp Nut Wrench (52), loosen the Clamp Nut (24) and pull the Angle Housing Assembly (22) away from the Motor Housing (5). This is a left-hand thread. Rotate the Nut Wrench clockwise to loosen the Nut.

NOTICE

Do not allow the Angle Head to rotate when separating it from the Motor. Components may fall from the Angle Head.

4. Grasp the Arbor and pull the assembled Arbor out of the Angle Head. If the Wick (27) needs replacement, pull it out of the Angle Housing.
5. If the Upper Arbor Bearing (26) needs replacement, place the Angle Head on the table of an arbor press, arbor end down, and press the Bearing out of the Angle Head.
6. Grasp the Arbor in leather-covered or copper-covered vise jaws with the collet end downward. Using an adjustable wrench, unscrew and remove the Bevel Gear Nut (28) and lift the Bevel Gear off the Arbor.
7. If the Lower Arbor Bearing (29) must be replaced, use a piece of tubing to support the Bearing on the table of an arbor press and press the Arbor from the Bearing.

Disassembly of the Motor

1. Pull the Flange (19) and Flow Ring (18) off the front of the Motor Housing (5).
2. Grasp the Bevel Pinion (21) and pull the assembled motor out of the Motor Housing. Remove the two Rear Rotor Bearing Spacers (10) from the bottom of the Housing.
3. Remove the Vanes (13) from the Rotor (12).
4. Grasp the Rotor in leather-covered or copper-covered vise jaws with the Bevel Pinion upward. Using a 1/2" wrench, unscrew and remove the Bevel Pinion (21).
5. If the Front Rotor Bearing (17) must be replaced, support the Front End Plate (14) between two blocks on the table of an arbor press. Place the blocks as close to the body of the Rotor as possible and press the Rotor from the Bearing and End Plate. Remove the Front End Plate Spacer (15) and Front Seal Assembly (16) from the hub of the Rotor.
6. If the Rear Rotor Bearing (9) must be replaced, use snap ring pliers to remove the Rear Rotor Bearing Retainer (11) and then remove the two Rear Rotor Bearing Spacers (10).
7. Using a bearing puller, pull the Rear Rotor Bearing off the hub of the Rotor.

Disassembly of the Inlet and Throttle

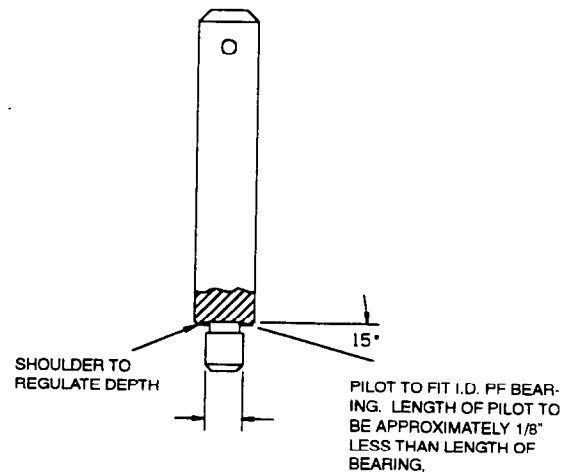
1. Using a 3/4" wrench, unscrew and remove the Inlet Assembly (1).
2. Remove the Inlet Seal (3) and Inlet Screen (2) from the Inlet.
3. Remove the Throttle Valve Spring Seat (4D), Throttle Valve Spring (4C) and Throttle Valve (4B) from the Motor Housing.
4. If the Throttle Valve Seat (4A) must be replaced, insert a hooked tool through the central opening of the Seat and, catching the underside of the Seat, pull it from the Housing.
5. If the Throttle Valve Cartridge Case (4) must be replaced, insert two hooked tools through the central opening of the Case approximately 180 degrees apart and, catching the underside of the Case, pull it from the Housing.
6. Press the Throttle Lever Pin (7) from the Housing and remove the Throttle Lever (6). Remove the Throttle Valve Plunger (8).

ASSEMBLY

General Instructions

1. Always press on the **inner ring** of a ball-type bearing when installing the bearing on a shaft.
2. Always press on the **outer ring** of a ball-type bearing when pressing the bearing into a bearing recess.
3. Whenever grasping a tool or part in a vise, always use leather-covered or copper-covered vise jaws. Take extra care not to damage threads or distort housings.
4. Always clean every part and wipe every part with a thin film of the recommended oil before installation.
5. Check every bearing for roughness. If an open bearing must be cleaned, wash it thoroughly in a clean, suitable cleaning solution and dry with a clean cloth. **Sealed or shielded bearings should not be cleaned.** Work grease into every open bearing before installation.
6. Apply a film of o-ring lubricant to every O-ring before installation.
7. Unless otherwise noted, always press on the stamped end of a needle bearing when installing a needle bearing into a recess. Use a bearing inserting tool similar to the one shown in Dwg. TPD786.

NEEDLE BEARING INSERTING TOOL



(Dwg. TPD786)

Assembly of the Throttle and Inlet

1. Insert the Throttle Valve Plunger (8) into the Motor Housing (5).
2. Position the Throttle Lever (6) on the Motor Housing and using an arbor press, press the Throttle Lever Pin (7) into the Housing and Lever. The Lever will retain the Plunger in the Housing.

MAINTENANCE SECTION

3. If the Throttle Valve Cartridge Case (4) was removed, lubricate the outside and the throttle stem end of the Case with o-ring lubricant. Using a wooden dowel, push the Case, open end trailing, into the Motor Housing.
4. If the Throttle Valve Seat (4A) was removed, use a wooden dowel with a flat end to push the Seat into the Case.
5. Push the small end of the Throttle Valve Spring (4C) onto the end of the Throttle Valve (4B) with the short stem until the Spring snaps into position around the hub and remains there. Install the dish end of the Throttle Valve Spring Seat (4D) onto the large end of the Throttle Valve Spring.
6. Holding the Housing with the Lever downward, make sure the Plunger is out of the way and insert the assembled Valve, long stem end leading, into the Cartridge Case.
7. Push the Inlet Screen (2), closed end leading, into the Inlet Assembly (1). After moistening the Inlet Seal (3) with o-ring lubricant and being careful not to nick the Seal on the threads of the Inlet, install the Seal on the Inlet.
8. Thread the Inlet Assembly into the Housing and tighten it between 13 to 15 ft-lb (17.6 to 20.3 Nm) torque.

Assembly of the Motor

1. If the Rear Rotor Bearing (9) was removed, stand the Rotor (12) upright on the table of an arbor press with the threaded end downward. Place the threaded rotor hub into a hole of a drilled block so that the Rotor rests against the large rotor body. Press the Rear Rotor Bearing onto the hub of the Rotor.

NOTICE

Press the Rotor Bearing onto the shaft with the shielded side of the Bearing against the rear end plate.

2. Install the Rear Rotor Bearing Retainer (11) in the groove on the hub of the Rotor.
3. Place the Front End Plate Spacer (15) onto the threaded hub of the Rotor and install the Front End Plate (14) around the Spacer, counterbored end trailing. Press the Front Seal Assembly (16), felt end trailing, onto the Spacer until the trailing end is flush with the Spacer. Lubricate the felt with IRAX No. 50P Oil.
4. Stand the Rotor on the table of an arbor press with the threaded end upward and press the Front Rotor Bearing (17) onto the hub of the Rotor.

NOTICE

The Front Rotor Bearing is a double flush ground bearing and must be installed in a specific manner. The end of the Bearing with a black stain or hash marks must be away from the Spacer.

5. Grasp the assembled Rotor in leather-covered or copper-covered vise jaws with the threaded rotor hub upward.
6. Thread the Bevel Pinion (21) onto the Rotor and using a torque wrench, tighten the Bevel Pinion between 9 and 10 ft-lb (12.2 and 13.6 Nm) torque.
7. Inject approximately 0.7 cc of IRAX No. 68-1LB Grease into the small recess at the bottom of the motor housing bore. Drop the two Rear Rotor Bearing Spacers (10) into the bottom of the motor housing bore.
8. Wipe each Vane (13) with a light film of oil and insert a Vane into each vane slot in the Rotor.
9. Grasp the Bevel Pinion and insert the assembled Rotor into the Motor Housing (5).
10. Assemble the Flow Ring (18) with the Flange (19) before installing the Flange on the Housing. Mate the Flow Ring to the end of the Flange without perforations. Align the notched projection on the edge of the Flow Ring with the letter "R" on the Housing. If the tool is to be used with front exhaust, purchase a Front Exhaust Flange (Part No. 49440-113) and align the notched projection on the edge of the Flow Ring with the letter "F" on the Housing.
11. Install the assembled Flange, Flow Ring leading, onto the front of the Motor Housing.

Assembly of the Angle Head

1. If the Upper Arbor Bearing (26) was removed and a new Bearing must be installed, proceed as follows:
 - a. Support the machined face of the Angle Head (22) on the table of an arbor press with the upper arbor bearing bore upward.
 - b. Press a new Upper Arbor Bearing into the bore, flush with the top of the Angle Housing.

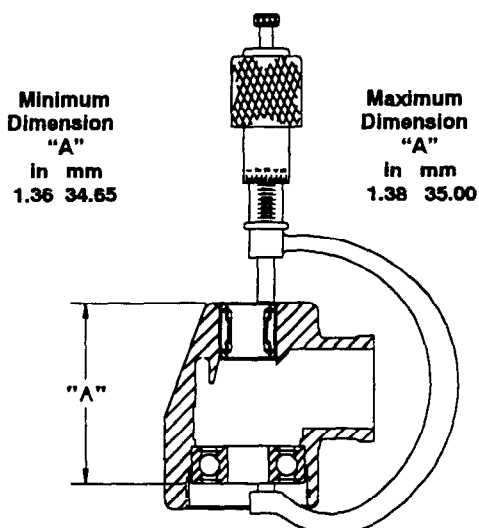
NOTICE

Always press on the stamped or closed end of the Bearing.

2. If the Lower Arbor Bearing (29) is being installed, it is necessary to note the identification marks on the Lower Arbor Bearing. The side of the Bearing having black stains or black hash marks on the side of the inner and outer races is opposite the flush ground side.

MAINTENANCE SECTION

3. Using your hand, push the Lower Arbor Bearing, **flush ground side inward**, into the recess at the machined end of the Angle Head.
4. Using a 2" micrometer, take a measurement from the inner ring of the Lower Arbor Bearing to the stamped or closed end of the Upper Arbor Bearing. See Dwg. TPD687.



(Dwg. TPD687)

5. Additional pressing of the Upper Arbor Bearing may be required to finally attain the correct dimension as indicated in the table above.
6. Remove the Lower Arbor Bearing.

NOTICE

In the following step, make certain any shims included with the Lower Arbor Bearing are installed onto the Arbor between the Bevel Gear (21) and the Bearing.

7. Using a sleeve that contacts the inner ring of the Lower Arbor Bearing, press the Bearing, **flush ground side of the Bearing trailing** onto the Arbor (31).
8. Slide the Bevel Gear, geared face trailing, onto the small threaded end of the Arbor, aligning the integral keys of the gear with the slotted keyways in the Arbor.

NOTICE

The Bevel Gear and Bevel Pinion are specially matched sets. Replace these parts only as a matched set.

9. Thoroughly clean the small threads on the Arbor above the Bevel Gear and the threads in the Bevel Gear Nut (28).
10. Apply a thin coat of Loctite 271 W/T Primer* (M. I. Hernon Grade 427) to the threads of the Bevel Gear Nut and the Nut threads on the Arbor. Thread the Bevel Gear Nut onto the Arbor to retain the Bevel Gear and tighten the Nut to 10 to 12 ft-lb (13.5 to 16.2 Nm) torque. Grease the Bevel Gear with 1.5 cc of IRAX No. 67 1LB Grease.
11. Form the Wick (27) into a horseshoe shape and insert it into the Angle Head. Push the Wick into the opening until it is compressed approximately 0.030" below the bevel gear bore. Soak the Wick with approximately 0.5 cc of IRAX No. 63Z4 Oil. **Do no substitute any other oil.**
12. Carefully grasp the assembled motor in leather-covered or copper-covered vise jaws with the Throttle Lever Upward.
13. Install the motor Clamp Nut (24), threaded end trailing, onto the motor end of the Angle Head. Spread the Clamp Spacer (23) and install it on the motor end of the Angle Head against the Clamp Nut.
14. Position the output end of the Angle Head upward in alignment with the Throttle Lever and thread the Clamp Nut onto the Motor Housing. Using the Clamp Nut Wrench (52), tighten the Nut to 20 to 25 ft-lb (27 to 34 Nm) torque. This is a **left-hand** thread, turn **counterclockwise** to tighten.
15. Insert the assembled Arbor into the Angle Head, bevel gear end first, making sure the teeth on the Bevel Gear and Pinion mesh. Rotate the Arbor manually to determine that they are rotating smoothly.
16. Thoroughly clean the internal threads of the Angle Head and the threads on the Arbor Bearing Cap (30).
17. Carefully apply a uniform coat of Vibra-Tite VC3 No. 205 ** to both sets of threads and allow the compound to cure for 10 to 20 minutes.
18. Using the Arbor Bearing Cap Wrench (53), install the Arbor Bearing Cap and tighten to 12 to 15 ft-lb (16.2 to 20.3 Nm) torque. The Bearing Cap has a **left-hand** thread: turn **counterclockwise** to install.
19. If the Drive Sleeve (33) is being replaced, slide a new Sleeve onto the Spindle Cap (32) until it is captured between the two outer lipped edges.
20. Using the Collet Body Wrench (50) to hold the Arbor, install the Spindle Cap onto the Arbor.

MAINTENANCE SECTION

Assembly of the Sanding Arm

NOTICE

In the following step, ball bearings used in models having 1/4" wide belts must have the bearing seal facing outward.

1. If the Idler Wheel Bearings (47) were removed, press one Bearing into the Idler Wheel (45) until it is flush with the edge of the Wheel. Invert the Wheel. Press the remaining Bearing into the Wheel until it is flush with the edge of the Wheel.

NOTICE

In the following step, one hole in the Yoke is slightly larger than the other one. Determining which hole is larger will enable you to use finger pressure to insert the Shaft through that side of the Yoke.

2. Position the assembled Idler Wheel between the two ears of the Yoke (42) and press the Idler Wheel Shaft through the Yoke and assembled Idler Wheel.
3. **For 12" x 1/2" and 18" x 1/2" models**, place the Yoke Spring (43) into the hole in the end of the Clevis (36) and position the assembled Yoke over the Spring at the end of the Clevis. Make certain the slots in the Yoke align with the pin hole in the Clevis. Compress the Spring with the Yoke and press the Yoke Retaining Pin (44) through the Clevis and Yoke.

For 18" x 1/4" models, place the Yoke Spring (43) inside the end of the Yoke opposite the Idler Wheel until it stops against the tab. Position the Clevis (36) to slide into the Yoke making certain the Spring enters the slot in the end of the Clevis. Make certain the slot in the Yoke aligns with the pin hole in the Clevis. Compress the Spring with the Yoke and press the Yoke Retaining Pin (44) through the Clevis and Yoke.

4. **For 12" x 1/2" and 18" x 1/2" models**, insert one of the Belt Plate Retaining Screws (40) through one of the holes in the Belt Plate (39). Install one of the Belt Plate Spacers (41) on the Screw and start the Screw into the Clevis at the guard end. Insert the remaining Screw into the hole in the Plate at the yoke end and install the remaining Spacer on that Screw between the Plate and Clevis. Tighten both Screws with a screwdriver.
5. If the Belt Pad (38) is being replaced, peel the protective tape off the Pad and place the adhesive side of the Pad against the side of the Clevis opposite the Belt Plate.
6. **For 12" models**, using a screwdriver, attach the Clevis to the Guard (34) with the two Clevis Mounting Screws (37).
For 18" models, position the Alignment Block (35A) between the Clevis and the Guard (34) and secure it in position by attaching the Clevis to the Guard with the two Clevis Mounting Screws (37).
7. Position the Guard (34) on the Angle Head (22) and secure it by tightening the Guard Clamp Screw (35) between 2 and 3/4 ft-lb (2.7 and 3.7 Nm) torque.
8. Install a new sanding belt over the Spindle Cap and around the Idler Wheel.
9. **For 18" models**, align the Cover (35B) with the Guard and slide it forward toward the Idler Wheel until it snaps into position and stays there.
10. Operate the Sander at low speed to determine if the new belt is tracking properly. If the belt fails to track properly, realign the Clevis by tightening or loosening one or both of the Clevis Mounting Screws.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE

Trouble	Probable Cause	Solution
Low power or low free speed	Insufficient air pressure	Check air line pressure at the Inlet of the tool. It must be 90 psig (6.2 bar/620 kPa).
	Clogged muffler elements	Disassemble the tool and agitate the bare Motor Housing and Flange in a clean, suitable cleaning solution. If the elements cannot be cleaned, replace the Motor Housing and/or the Flange.
	Plugged Inlet Screen	Clean the Inlet Screen in a clean, suitable, cleaning solution or replace the Screen.
	Worn or broken Vanes	Install a complete set of new Vanes.
	Loose Clamp Nut	Tighten the Nut to 20 to 25 ft-lb (27 to 34 Nm) torque.
	Worn or broken Motor Housing	Replace the Motor Housing.
	Internal air leakage in the Motor Housing indicated by high air consumption/low speed or air leaking out the front and rear exhaust simultaneously.	Replace the Motor Housing.
	Grit buildup under the Throttle Lever restricting full Throttle Valve Plunger movement.	Remove the Throttle Lever and clean the groove in the Motor Housing.
	Bent stem on Throttle Valve	Replace the Throttle Valve
	Front Seal Cup dragging against the shield of the Front Rotor Bearing	Reposition or replace the Front Seal Cup.
Scoring	Worn Front End Plate Spacer or Front End Plate	Install a new Front End Plate Spacer and Front End Plate.
	Worn Front Rotor Bearing	Install a new Front Rotor Bearing.
Sanding Belt not tracking properly	Worn Idler parts	Install a new Idler Wheel Assembly
	Misalignment	Adjust the Clevis Mounting Screws
	Sanding on push side of Clevis	Sand on pull side of the Clevis.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE		
Trouble	Probable Cause	Solution
Leaky Throttle Valve	Dirt accumulation on Throttle Valve or Valve Seat	Disassemble, inspect and clean parts.
	Worn Throttle Valve or Valve Seat	Replace the Throttle Valve and/or Throttle Valve Seat.
Exhausts at wrong location	Incorrect orientation of the Flow Ring	Reverse the face of the Flow Ring against the Motor Housing.
Front Rotor Bearing runs hot	Incorrect installation of the Front Seal Cup	Reposition the Front Seal Cup flush with the face of the Front End Plate Spacer.
	Front End Plate Spacer rubbing the bore of the Front End Plate	Replace the Front End Plate and Front End Plate Spacer combination.
	Incorrect Front Rotor Bearing installation orientation	If a black stain or black hashmarks are not visible on the face of the Bearing when it is assembled with the End Plate and Rotor, the Bearing is backwards. If possible, remove the Bearing and install it correctly or replace the Bearing.
Slow tool idle	Bent or leaky Throttle Valve	Replace the Throttle Valve.
Air leakage around Flow Ring	Damaged, mutilated or missing Flange Clamp	Replace the Flange Clamp.
	Damaged Flow Ring	Replace the Flow Ring
Rough operation/vibration	Improper lubrication or dirt build-up	Disassemble the tool and clean in a clean, suitable, cleaning solution. Assemble the tool and inject 3 cc of the recommended oil into the Inlet and run the Sander long enough to coat the internal parts with the oil.
	Worn or broken Rear Rotor Bearing or Front Rotor Bearing	Replace the worn or broken Bearings. Examine the Front End Plate, Front End Plate Spacer, Front Seal Cup and Rear Rotor Bearing Spacers and replace any damaged parts. If the rear end plate is damaged, replace the Rotor.
	Worn or broken Upper Arbor Bearing or Lower Arbor Bearing	Replace the worn or broken Bearing.
	Worn or broken Bevel Gear or Bevel Pinion	Examine the Bevel Gear and Bevel Pinion. If either is worn or damaged, replace both the Gear and Pinion because they are a matched set and must not be used separately.

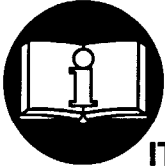
NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

**SERIES GR03A-EU ANGLE BELT SANDERS****NOTICE**

Series GR03A-EU Angle Belt Sanders are designed for work in the metal fabricating industry and foundry applications. These small Angle Belt Sanders are very efficient at grinding weld bead, slag and parting lines while leaving a fine finish.

ARO is not responsible for customer modification of tools for applications on which ARO 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 all regulations (local, state, federal and country), that may apply to hand held/hand operated pneumatic tools.
- 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 5/16" (8 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 rotate 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 ARO.
- Whenever the Angle Head is installed or repositioned, the Throttle Lever must be positioned so that reaction torque will not tend to retain the throttle in the "ON" position.
- 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 ARO 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 ARO Tool Products Authorized Servicenter.

For parts and service information, contact your local ARO distributor, or the Customer Service Dept. of the Ingersoll-Rand Distribution Center, White House, TN at PH: (615) 672-0321, FAX: (615) 672-0601

ARO Tool Products**Ingersoll-Rand Company**

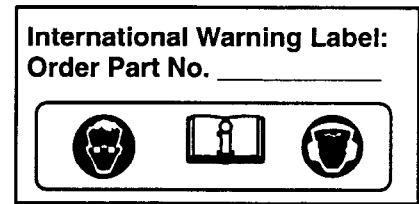
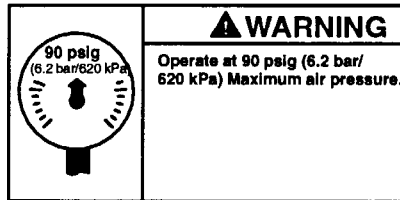
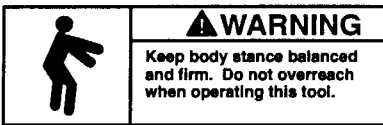
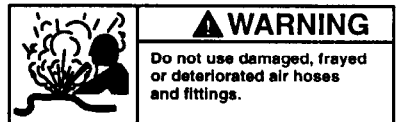
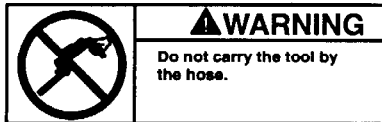
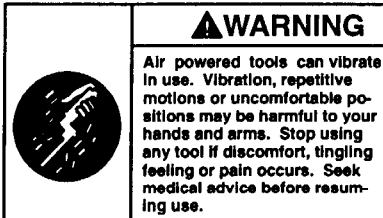
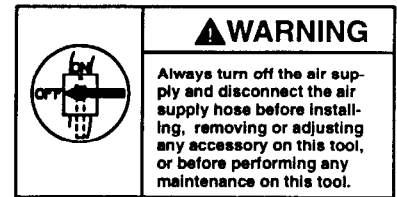
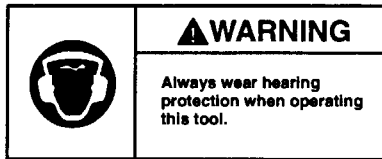
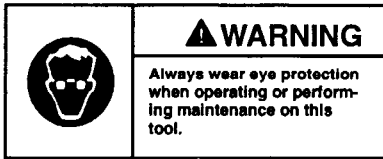
SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131
• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY PRINTED IN U.S.A.

ARO**Part of worldwide Ingersoll-Rand**

WARNING LABEL IDENTIFICATION

▲ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.



SANDER SPECIFIC WARNINGS

▲ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- Do not use this tool if actual free speed exceeds the nameplate rpm.
- Before mounting a sanding belt, after any tool repair or whenever a Sander is issued for use, check free speed of the tool with a tachometer to make certain its actual speed at 90 psig (6.2 bar/620 kPa) does not exceed rpm stamped or printed on the nameplate. Sanders in use on the job must be similarly checked at least once each shift.
- Always use the recommended ARO Guard furnished with the Sander.
- Series GR03A-12 Angle Belt Sanders have a free speed of 12 000 rpm and a belt speed of 2 700 sfpm while Series GR03A-20 Angle Belt Sanders have a free speed of 20 000 rpm and a belt speed of 4 500 sfpm, when operated at 90 psig (6.2 bar/620 kPa) air pressure. Operation at higher air pressure will result in excessive speed.
- Do not operate a Belt Sander with the Cover removed.

ADJUSTMENTS

— INSTALLING A SANDING BELT —

When installing a new sanding belt, proceed as follows:

1. For 18" models, slide the Cover rearward toward the handle of the Sander until it is free. It may require a light rap on the front edge of the Cover to disengage it from its locking points.
2. Compress the Idler Wheel and slip the old belt off the drive Sleeve. Release the pressure on the Idler Wheel and remove the belt.
3. Position a new belt on the Idler Wheel.
4. Compress the Idler Wheel with the belt and slip the opposite end of the belt onto the Drive Sleeve around the Spindle Cap. Release the pressure on the Idler Wheel.
5. For 18" models, align the Cover with the Guard and slide it forward toward the Idler Wheel until it snaps into position and stays there.
6. Operate the Sander at low speed to determine if the new Belt is tracking properly. If the Belt fails to track properly, realign the Clevis by tightening or loosening one or both of the Clevis Mounting Screws.

PLACING TOOL IN SERVICE

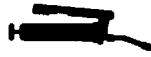
TOOL OPERATION

Sand using any portion of the exposed Sanding Belt. For best results, sand on that portion of the Belt being pulled by the Drive Wheel.

LUBRICATION



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

Always use an air line lubricator with these tools. We recommend the following Filter-Lubricator-Regulator Unit:

International – IRAX No. C26-C4-A29

After each two hours of operation, if an air line lubricator is not used, inject 1/2 to 1 cc of IRAX No. 10P Oil into the Air Inlet.

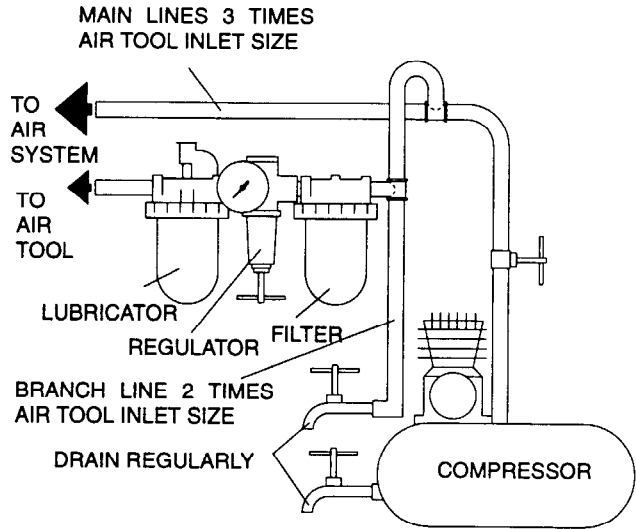
After each eight hours of operation, inject approximately 1/2 cc of IRAX No. 67 1LB or IRAX No. 77 1LB Grease into the Angle Head Grease Fitting. Excessive lubrication will cause grease to work out around the Arbor.

Whenever a new Wick is installed, thoroughly saturate the Wick with approximately 1-1/2 cc of IRAX No. 63Z4 Oil. Do not substitute any other oil.

Whenever the motor is disassembled, remove the old grease and refill the cavity behind the Rear Rotor Bearing with 3/4 cc of IRAX No. 68 1LB Grease.

CAUTION

Do not mark any nonmetallic surface of this tool with customer identification codes. Such action could affect tool performance.



(Dwg. TPD905-1)

SPECIFICATIONS

Model	Belt Size	Arbor Speed	Belt Speed	•Sound Level dB (A)		♦ Vibrations Level
	in (mm)	rpm	sfpm	Pressure	Power	m/s ²
GR03A-12RB-3-LP-EU	12 x 1/2 (305 x 13)	12 000	2 700	79.1	---	0.53
GR03A-20RB-3-LP-EU	12 x 1/2 (305 x 13)	20 000	4 500	81.4	---	0.6

- Tested in accordance with ANSI S5.1-1971 at free speed
- ♦ Tested in accordance with ISO8662-1 sanding on steel workpiece

DECLARATION OF CONFORMITY

We Ingersoll-Rand, Co.
(supplier's name)

Swan Lane, Hindley Green, Wigan WN2 4EZ
(address)

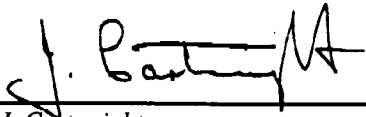
declare under our sole responsibility that the product,

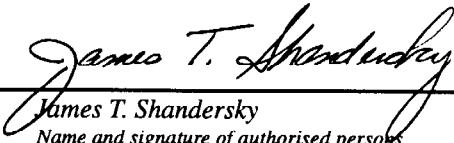
Series GR03A-EU Angle Belt Sanders

to which this declaration relates, is in compliance with the provisions of
89/392/EEC, 91/368/EEC, 93/44/EEC AND 93/68/EEC Directives

by using the following Principle Standards: ISO8662

Serial No. Range: (1996 →) XUA XXXXX →


J. Cartwright
Name and signature of authorised persons


James T. Shandersky
Name and signature of authorised persons

June, 1996
Date

June, 1996
Date

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.

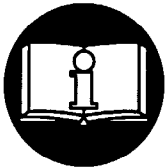
PONCEUSES D'ANGLE À BANDE DE LA SÉRIE GR03A-EU

NOTE

Les ponçuses d'angle à bande de la Série GR03A-EU sont destinées aux applications de tôlerie et de fonderie. Ces petites ponçuses à bande sont particulièrement bien adaptées au polissage des cordons de soudure, du laitier et des jointures de moulage et laissent une très bonne finition.

ARO 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 ARO.

⚠ 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

- Cet outil doit toujours être exploité, inspecté et entretenu conformément à toutes les réglementations (locales, départementales, fédérales et nationales), applicables aux outils pneumatiques tenus/commandés à la main.
- 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 8 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 gasol 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 froids 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 rotation 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 ARO.
- A chaque fois que le renvoi d'angle est installé ou repositionné, le levier de commande doit être positionné de manière à ce que le couple de réaction n'ait pas tendance à maintenir le levier de commande en position "MARCHE".
- 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 ARO 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 ARO Tool Products le plus proche.

Pour les informations relatives aux pièces et au service, contactez votre distributeur ARO.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY Imprimé aux E.U.








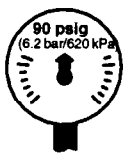

ARO

Membre du groupe mondial Ingersoll-Rand

SIGNIFICATION DES ÉTIQUETTES D'AVERTISSEMENT

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

	ATTENTION Porter toujours des lunettes de protection pendant l'utilisation et l'entretien de cet outil.		ATTENTION Porter toujours une protection acoustique pendant l'utilisation de cet outil.		ATTENTION 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.
	ATTENTION 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.		ATTENTION Ne pas transporter l'outil par son flexible.		ATTENTION Ne pas utiliser des flexibles ou des raccords endommagés, effilochés ou détériorés.
	ATTENTION Garder une position équilibrée et ferme. Ne pas se pencher trop en avant pendant l'utilisation de cet outil.		ATTENTION Utiliser de l'air comprimé à une pression maximum de 6,2 bar (620 kPa).	Etiquette d'avertissement internationale: Commander Pièce No. _____ 	

AVERTISSEMENTS SPÉCIFIQUES AUX PONCEUSES

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

- Ne pas utiliser cet outil si la vitesse à vide réelle dépasse celle indiquée sur la plaque signalétique.
- Avant de monter une bande de ponçage, après toute réparation de l'outil ou chaque fois que la ponceuse est sortie du magasin, vérifier la vitesse à vide de l'outil avec un compte-tours pour s'assurer qu'à une pression d'alimentation de 6,2 bar (620 kPa), elle ne dépasse pas celle poinçonnée ou imprimée sur la plaque signalétique. Les ponceuses sorties sur chantier doivent être vérifiées de la même façon au moins une fois par poste.
- Utiliser toujours la ponceuse équipée du carter de protection recommandé par ARO.
- Les ponceuses d'angle à bande de la série GR03A-12 ont une vitesse à vide de 12 000 tr/mn et une vitesse de bande de 2 700 sfpm, tandis que les ponceuses d'angle à bande de la série GR03A-20 ont une vitesse à vide de 20 000 tr/mn et une vitesse de bande de 4 500 sfpm, lorsqu'alimentées à une pression d'air de 6,2 bar/620 kPa. L'exploitation à une pression d'air supérieure produira une vitesse excessive.
- Ne jamais exploiter la ponceuse lorsque le couvercle est déposé.

RÉGLAGES

— MONTAGE DE LA BANDE ABRASIVE —

Pour installer une nouvelle bande abrasive, procéder comme suit :

1. **Pour les modèles de 18"**, glisser le couvercle vers l'arrière en direction de la poignée, jusqu'à ce qu'il soit libre. Un léger coup sur le devant du couvercle pourra être nécessaire pour le désengager de ses points de verrouillage.
2. Comprimer la roue libre et faire glisser l'ancienne bande du manchon d'entraînement. Relâcher la pression sur la roue libre et déposer la bande.
3. Placer une bande neuve sur la roue libre.
4. Comprimer la roue libre et la bande et faire glisser l'extrémité opposée de la bande sur le manchon d'entraînement autour du chapeau de broche. Relâcher la pression sur la roue libre.
5. **Pour les modèles de 18"**, aligner le couvercle et le carter de protection et glisser le couvercle vers la roue libre jusqu'à ce qu'il s'engage en position.
6. Faire tourner la ponceuse à basse vitesse pour vérifier l'alignement correct de la bande. Si la bande n'est pas alignée, ajuster la chape en serrant ou en desserrant une ou les deux vis de montage de chape.

MISE EN SERVICE DE L'OUTIL

EXPLOITATION DE L'OUTIL

Poncer en utilisant n'importe quelle section exposée de la bande de ponçage. Pour obtenir les meilleurs résultats, utiliser la partie de la bande tractée par la roue d'entraînement.

LUBRIFICATION



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

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

International – IRAX No. C26-C4-A29

Toutes les deux heures de fonctionnement, si un lubrificateur de ligne n'est pas utilisé, injecter 1/2 à 1 cm³ d'huile IRAX No. 10P dans le raccord d'admission.

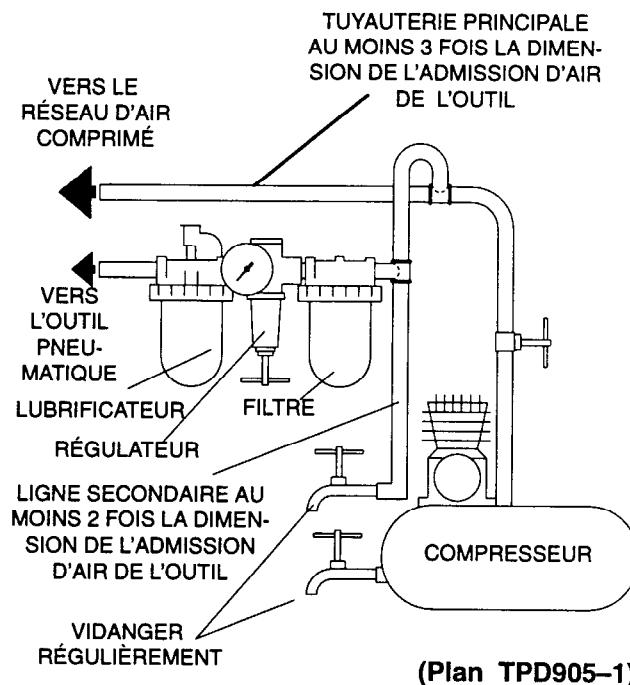
Toutes les huit heures de fonctionnement, injecter 1 cm³ de graisse IRAX No. 67 1LB ou IRAX No. 77 1LB dans le raccord de graissage du renvoi d'angle. **Tout graissage excessif causera l'extrusion de la graisse autour de l'arbre.**

A chaque fois qu'un nouveau feutre graisseur est installé, le saturer avec environ 1,5 cm³ d'huile IRAX No. 63Z4. **Ne pas utiliser d'autre huile.**

A chaque fois que le moteur est démonté, enlever la vieille graisse et remplir la cavité derrière le roulement arrière de rotor avec 0,75 cm³ d'huile IRAX No. 68 1LB.

AVERTISSEMENT

Ne pas marquer les codes d'identification client sur les surfaces non métalliques de cet outil. De telles actions pourraient affecter les performances de l'outil.



(Plan TPD905-1)

SPÉCIFICATIONS

Modèle	Dimension de la Bande pouces (mm)	Vitesse d'arbre tr/mn	Vitesse de la bande sfpm	Niveau sonore dB (A)		Niveau de vibration m/s ²
				Pression	Puissance	
GR03A-12RB-3-LP-EU	12 x 1/2 (305 x 13)	12 000	2 700	79,1	---	0,53
GR03A-20RB-3-LP-EU	12 x 1/2 (305 x 13)	20 000	4 500	81,4	---	0,6

- Testé selon ANSI S5.1-1971 à la vitesse à vide
- ◆ Testé selon ISO8662-1 en ponçant une pièce en acier

CERTIFICAT DE CONFORMITÉ

Nous Ingersoll-Rand, Co.
(nom du fournisseur)

Swan Lane, Hindley Green, Wigan WN2 4EZ
(adresse)

déclarons sous notre seule responsabilité que le produit

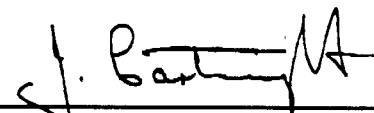
Ponceuses d'Angle à Bande de la Série GR03A-EU

objet de ce certificat, est conforme aux prescriptions des directives:

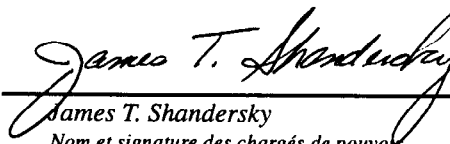
CEE 89/392, CEE 91/368, CEE 93/44 ET CEE 93/68

en observant les normes de principe suivantes: ISO8662

Plage de No. de série: (1996 →) XUA XXXXX →



J. Cartwright
Nom et signature des chargés de pouvoir



James T. Shandersky
Nom et signature des chargés de pouvoir

Juin, 1996
Date

Juin, 1996
Date

NOTE

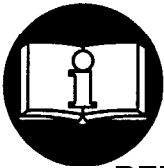
CONSERVEZ SOIGNEUSEMENT CES INSTRUCTIONS. NE PAS LES DÉTRUIRE.

A la fin de sa durée de vie, il est recommandé de démonter l'outil, de dégraisser les pièces et de les séparer en fonction des matériaux de manière à ce que ces derniers puissent être recyclés.

BANDSCHLEIFMASCHINEN DER BAUREIHE GR03A-EU**HINWEIS**

Winkelbandschleifmaschinen der Baureihe GR03A-EU werden eingesetzt für Arbeiten in Stahlbau- und Gießereibetrieben. Die kleinen Winkelbandschleifmaschinen sind äußerst leistungsstark beim Schleifen von Schweißraupen, Schlacke und Trennfugen und hinterlassen eine glatte Oberfläche.

ARO lehnt jede Haftung für Veränderungen an Werkzeugen ab, die ohne vorherige Rücksprache mit ARO vorgenommen werden.

⚠ ACHTUNG

**NACHFOLGEND WICHTIGE SICHERHEITSHINWEISE.
DIESE BETRIEBSANWEISUNG VOR INBETRIEBNAHME DES WERKZEUGES
UNBEDINGT LESEN.**

**DER ARBEITGEBER IST VERPFLICHTET, DIE IN DIESEM HANDBUCH GEGEBENEN
INFORMATIONEN DEM BEDIENER ZUGÄNGLICH ZU MACHEN.
DIE NICHTEINHALTUNG DIESER WARNHINWEISE KANN ZU VERLETZUNGEN FÜHREN.**

INBETRIEBNAHME DES WERKZEUGES

- Das Werkzeug stets nach den örtlich und landesweit geltenden Vorschriften für handgehaltene/handbetriebene Druckluftwerkzeuge betreiben.
- Zur Erzielung höchster Sicherheit, Leistung und Haltbarkeit der Teile sollte dieses Werkzeug mit einem maximalen Luftdruck von 6,2 bar/6,2 kPa am Lufteinlaß und einem Luftzufuhrschlauch 8 mm Innendurchmesser betrieben werden.
- Vor Montage, Demontage oder Verstellung von Aufsatzteilen bzw. Wartung dieses Werkzeugs die Druckluftversorgung allseitig abschalten und Druckluftschlauch abtrennen.
- Keine beschädigten, durchgeschauerten oder abgenutzten Luftschläuche und Anschlüsse verwenden.
- Darauf achten, daß alle Schläuche und Anschlüsse die passende Größe haben und korrekt befestigt sind. In Zeichnung TPD905-1 ist eine typische Rohrleitungsanordnung abgebildet.
- Stets saubere, trockene Luft und einen Luftdruck von 6,2 bar verwenden. Staub, ätzende Dämpfe und/oder Feuchtigkeit können den Motor eines Druckluftwerkzeuges beschädigen.
- Die Werkzeuge nicht mit brennbaren oder flüchtigen Flüssigkeiten wie Kerosin und Diesel schmieren.
- Keine Schilder entfernen. Beschädigte Schilder austauschen.
- Beim Betreiben dieses Werkzeuges stets Gehörschutz tragen.
- Hände, lose Bekleidungsstücke und lange Haare vom rotierenden Ende des Werkzeuges fernhalten.
- Bei Start und Betrieb eines Werkzeuges auf Rückschlag achten und darauf vorbereitet sein.
- Während des Betriebes für festen Halt sorgen und den Körper nicht zu weit vorlehnen. Bei Betrieb mit empfohlenem oder niedrigerem Luftdruck können hohe Reaktionsdrehmomente auftreten.
- Nach dem Loslassen des Drückers kann das Werkzeug noch kurz weiterschlagen.
- Druckluftbetriebene Werkzeuge können während des Betriebs vibrieren. Vibrationen, häufige gleichförmige Bewegungen oder unbequeme Positionen können schädlich für Hände und Arme sein. Bei Unbehagen, Kribbeln oder Schmerzen das Werkzeug nicht mehr benutzen. Vor dem erneuten Arbeiten mit dem Werkzeug ärztliche Hilfe aufsuchen.
- Stets von ARO empfohlenes Zubehör verwenden.
- Wird ein Winkelkopf montiert oder in seiner Stellung korrigiert, muß der Drosselhebel so ausgerichtet sein, daß das Reaktionsdrehmoment die Drossel nicht auf der "ON"-Position hält.
- Das Werkzeug ist nicht für die Arbeit in explosiven Atmosphären geeignet.
- Dieses Werkzeug ist nicht gegen elektrischen Schlag isoliert.

WERKZEUGEINSATZ

- Beim Betreiben oder Warten dieses Werkzeuges stets Augenschutz tragen.

HINWEIS

Die Verwendung von nicht Original-ARO kann Sicherheitsrisiken, verringerte Standzeit und erhöhten Wartungsbedarf nach sich ziehen und alle Garantieleistungen ungültig machen.

Reparaturen sollen nur von autorisiertem geschultem Personal durchgeführt werden. Wenden Sie sich an Ihre nächste ARO Tool Products- Niederlassung oder den autorisierten Fachhandel.

Für Informationen zu Teilen und Dienstleistungen wenden Sie sich bitte an die ARO-Vertretung in Ihrer Nähe.

ARO Tool Products**Ingersoll-Rand Company**

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY Gedruckt in den U.S.A.












ARO

Zugehörig zur weltweiten Ingersoll-Rand-Gruppe

ANWEISUNGEN AUF WARNSCHILDERN

⚠ ACHTUNG

DIE NICHTEINHALTUNG DIESER WARNHINWEISE KANN ZU VERLETZUNGEN FÜHREN.

	⚠ ACHTUNG Beim Betreiben oder Warten dieses Werkzeuges stets Augenschutz tragen.		⚠ ACHTUNG Beim Betreiben dieses Werkzeuges stets Gehörschutz tragen.		⚠ ACHTUNG Vor Wartungsarbeiten oder dem Austausch von Zubehör ist das Werkzeug von der Druckluftversorgung abzuschalten.
	⚠ ACHTUNG Druckluftbetriebene Werkzeuge können während des Betriebs vibrieren. Vibrationen, häufige gleichförmige Bewegungen oder unbequeme Positionen können schädlich für Hände und Arme sein. Bei Unbehagen, Kribbeln oder Schmerzen das Werkzeug nicht mehr benutzen. Vor dem erneuten Arbeiten mit dem Werkzeug ärztliche Hilfe suchen.		⚠ ACHTUNG Das Werkzeug nicht am Schlauch tragen.		⚠ ACHTUNG Keine beschädigten, durchgescheuerten oder abgenutzten Luftschläuche und Anschlüsse verwenden.
	⚠ ACHTUNG Während des Betriebs für festen Halt sorgen und den Körper nicht zu weit nach vorne beugen.		⚠ ACHTUNG Mit einem maximalen Luftdruck von 6,2 bar/620 kPa (90 psig) betreiben.	Internationales Warnschild: Teile Nr. _____   	

SPEZIFISCHE WARNHINWEISE FÜR SCHMIRGELMASCHINEN

⚠ ACHTUNG

DIE NICHTEINHALTUNG DIESER WARNHINWEISE KANN ZU VERLETZUNGEN FÜHREN.

- Das Werkzeug nicht einsetzen, wenn die tatsächliche freie Drehzahl die auf dem Typenschild angegebene Drehzahl überschreitet.
- Vor dem Aufsetzen eines Schleifbandes, nach jeder Werkzeugreparatur oder vor dem Ersteinsatz einer Schleifmaschine ist stets mit einem Tachometer sicherzustellen, daß die tatsächliche freie Drehzahl der Schleifmaschine bei 6,2 bar/620 kPa (90 psig) die auf dem Typenschild eingestempelte oder gedruckte Drehzahl nicht überschreitet. Ebenso müssen im Einsatz befindliche Schleifmaschinen mindestens einmal pro Schicht überprüft werden.
- Stets die empfohlene, mit der Schleifmaschine gelieferte ARO –Schutzvorrichtung verwenden.
- Winkelbandschleifmaschinen der Baureihe GR03A–12 haben eine freie Drehzahl von 12000 U/min und eine Bandgeschwindigkeit von 2700 sfpm, Winkelbandschleifmaschinen der Baureihe GR03A–20 haben eine freie Drehzahl von 20000 U/min und eine Bandgeschwindigkeit von 4500 sfpm, bei einem Luftdruck von 6,2 bar/620 kPa (90 psig). Das Betreiben des Werkzeuges bei höherem Luftdruck führt zu einer überhöhten Drehzahl.
- Die Bandschleifmaschine auf keinen Fall ohne Abdeckung benutzen.

EINSTELLUNGEN

– AUFSETZEN EINES SCHLEIFBANDES –

Beim Aufsetzen eines neuen Schleifbandes wird folgendermaßen vorgegangen:

1. Bei 18-Zoll Modellen die Abdeckung in Richtung Griff nach hinten schieben, bis sie frei ist. Unter Umständen muß leicht auf die Vorderseite der Abdeckung geklopft werden, um sie aus der Arretierung zu lösen.
2. Die Leitscheibe andrücken und das alte Band von der Antriebsbuchse runterschieben. Den Druck von der Leitscheibe wegnehmen und das Band abnehmen.
3. Ein neues Band auf die Leitscheibe aufsetzen.
4. Die Leitscheibe mit dem Band andrücken und das andere Ende des Bandes auf die Antriebsbuchse um die Spindelkappe aufschieben. Den Druck auf die Leitscheibe verringern.
5. Bei 18-Zoll Modellen die Abdeckung mit der Schutzvorrichtung ausrichten und nach vorne bis zum Leitrad schieben, bis sie fest einklinkt.
6. Die Schleifmaschine mit niedriger Geschwindigkeit laufen lassen, um sicherzustellen, daß das neue Band spurgenaу läuft. Falls das Band nicht spurgenaу läuft, die Gabel durch Festziehen bzw. Lösen einer oder beider Gabelbefestigungsschrauben neu ausrichten.

INBETRIEBNAHME DES WERKZEUGES

BETREIBEN DES WERKZEUGES

Mit vorstehendem Schleifband schleifen. Beste Ergebnisse erzielt man, wenn man mit dem Bandteil arbeitet, der von der Antriebsscheibe gezogen wird.

SCHMIERUNG



IRAX Nr. 10P
IRAX Nr. 50P
IRAX Nr. 63Z4



IRAX Nr. 67 1LB
IRAX Nr. 68 1LB
IRAX Nr. 77 1LB

Das Werkzeug stets mit einem Leitungöler verwenden. Es wird folgende Filter-Regler-Öler-Kombination empfohlen:

IRAX Modell-Nr. C26-C4-A29.

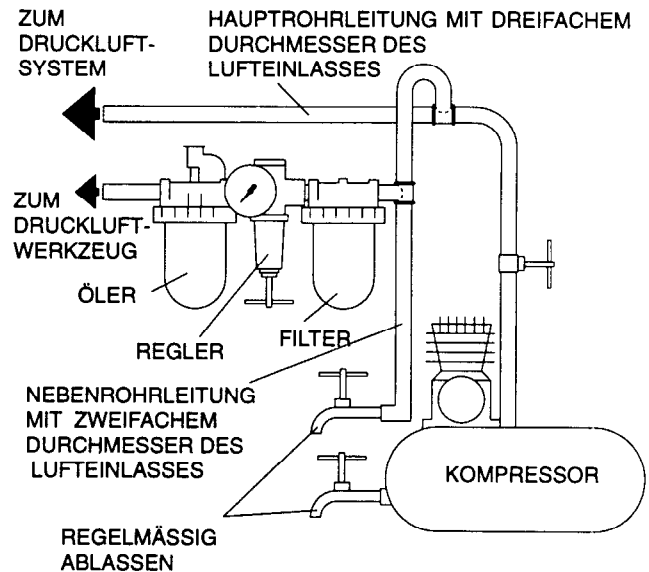
Wird kein Leitungöler verwendet, nach jeweils zwei Betriebsstunden 0,5 – 1 ccm IRAX-Öl Nr. 10P in den Lufterinlaß des Werkzeuges geben.

Nach jeweils acht Betriebsstunden etwa 0,5 ccm IRAX-Fett Nr. 67 1LB oder IRAX Fett Nr. 77 1LB in den Schmiernippel im Winkelkopf einspritzen. Bei zu starker Schmierung kann Fett um die Spindel herum austreten. Wenn ein neuer Docht eingesetzt wird, diesen mit ungefähr 1,5 ccm IRAX-Öl Nr. 63Z4 tränken. Kein anderes Öl verwenden.

Bei jeder Demontage des Motors das alte Fett entfernen und den Hohlraum hinter dem hinteren Rotorlager mit 0,75 ccm IRAX-Fett Nr. 68 1LB füllen.

VORSICHT

Die nicht-metallische Oberfläche des Werkzeuges ist keinesfalls mit Kunden-Identifikations-Merkmalen zu versehen. Dies kann die Leistung des Werkzeuges beeinträchtigen.



(Zeichn. TPD905-1)

TECHNISCHE DATEN

Modell	Bandgröße	Spindel-drehzahl	Band-geschwin-digkeit	Schallpegel dB (A)		Schwingungs-intensität
				Druck	Leistung	
	Zoll (mm)	U/min	sfpm			m/s ²
GR03A-12RB-3-LP-EU	12 x 1/2 (305 x 13)	12 000	2 700	79,1	---	0,53
GR03A-20RB-3-LP-EU	12 x 1/2 (305 x 13)	20 000	4 500	81,4	---	0,6

- Gemäß ANSI S5.1-1971 bei freier Drehzahl getestet
- ♦ Gemäß ISO8662-1 beim Schmirgeln eines Werkstückes aus Stahl getestet

KONFORMITÄTSERKLÄRUNG

Wir Ingersoll-Rand, Co.
(Name des Herstellers)

Swan Lane, Hindley Green, Wigan WN2 4EZ
(Adresse)

erklären hiermit, gemäß unserer alleinigen Verantwortung, daß die Geräte:

Bandschleifmaschinen der Baureihe GR03A-EU

auf die sich diese Erklärung bezieht, den Richtlinien:

89/392/EEC, 91/368/EEC, 93/44/EEC UND 93/68/EEC

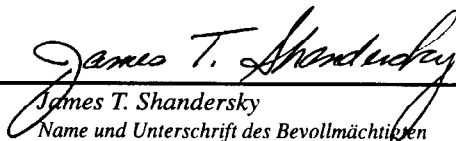
unter Anlehnung an die folgenden Grundnormen entsprechen:

ISO8662

Serien-Nr.-Bereich: (1996 →) XUA XXXXX →


J. Cartwright
Name und Unterschrift des Bevollmächtigten

Juni, 1996
Datum


James T. Shandersky
Name und Unterschrift des Bevollmächtigten

Juni, 1996
Datum

HINWEIS

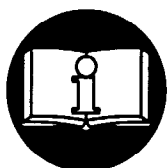
DIESE ANWEISUNGEN SIND SORGFÄLTIG AUFZUBEWAHREN. NICHT ZERSTÖREN.

Zur Entsorgung ist das Werkzeug vollständig zu demontieren, zu entfetten und nach Materialarten getrennt der Wiederverwertung zuzuführen.

**LEVIGATRICI A NASTRO SERIE GR03A-EU****AVVISO**

Le levigatrici ad angolo a nastro serie GR03A-EU sono state progettate per applicazioni di lavori nell'industria della fabbricazione di metalli. Queste piccole levigatrici ad angolo a nastro sono molto efficienti nella levigatura dei cordoni di saldatura, di scorie e di linee di separazione lasciando un'ottima rifinitura.

La ARO non è responsabile delle modifiche apportate agli attrezzi dai clienti per adattarli ad applicazioni per le quali la ARO non sia stata interpellata.

**AVVERTENZA**

**IMPORTANTE INFORMAZIONE DI SICUREZZA ACCLUSA.
LEGGERE IL PRESENTE MANUALE PRIMA DI USARE L'ATTREZZO.
È RESPONSABILITÀ DEL DATORE DI LAVORO DI METTERE QUEST'INFORMAZIONE
NELLE MANI DELL'OPERATORE.
LA MANCATA OSSERVANZA DELLE SEGUENTI AVVERTENZE PUÒ CAUSARE
LESIONI FISICHE.**

MESSA IN SERVIZIO DELL'ATTREZZO

- Usare, ispezionare e mantenere sempre quest'attrezzo secondo tutti i regolamenti (locali, statali, federali e nazionale), che possano essere applicabili agli attrezzi a mano pneumatici.
- Per sicurezza, massime prestazioni e massima durabilità delle parti, usare quest'attrezzo ad una massima pressione d'aria di 90 psig (6,2 bar/620 kPa) all'ingresso con un flessibile di alimentazione dell'aria con diametro interno di 5/16" (8 mm).
- Disinserire sempre l'alimentazione aria e staccare il relativo tubo dall'attrezzo, prima di installare, togliere o regolare qualsiasi accessorio, oppure prima di eseguire qualsiasi operazione di manutenzione dell'attrezzo.
- Non adoperare tubi e raccordi danneggiati, consumati o deteriorati.
- Assicurarci che tutti i tubi ed i raccordi siano delle corrette dimensioni e saldamente serrati. Consultare il disegno TPD905-1 per una tipica disposizione dei tubi.
- Usare sempre aria pulita ed asciutta alla pressione max di 90 psig (6,2 bar/620 kPa). Polvere, fumi corrosivi e/o un eccesso di umidità possono rovinare il motore di un attrezzo pneumatico.
- Non lubrificare gli attrezzi con liquidi infiammabili o volatili come kerosene, gasolio o combustibile per aviogetti.
- Non togliere nessuna etichetta. Sostituire eventuali etichette danneggiate.

COME USARE L'ATTREZZO

- Indossare sempre degli occhiali protettivi quando si adopera questo attrezzo o se ne esegue la manutenzione.

- Indossare sempre delle cuffie protettive quando si adopera questo attrezzo.
- Tenere le mani, gli indumenti sciolti ed i capelli lunghi distanti dall'estremità battente dell'attrezzo.
- Fare attenzione e cercare di anticipare improvvise variazioni di movimento durante l'avviamento e l'uso di qualsiasi attrezzo pneumatico.
- Nell'usare l'attrezzo, mantenere con il corpo una posizione salda e ben bilanciata. Non sbilanciarsi durante l'uso di questo attrezzo. Delle elevate reazioni di coppia si possono verificare alla pressione d'aria raccomandata o inferiore.
- Gli accessori dell'attrezzo potrebbero continuare a funzionare brevemente dopo che è stata disinserita l'immissione.
- Gli attrezzi pneumatici possono vibrare durante l'uso. Le vibrazioni, i movimenti ripetitivi o le posizioni scomode possono risultare dannosi per le mani e le braccia. Interrompere l'uso dell'attrezzo se si avvertono sintomi di disagio fisico, formicolio o dolore. Interpellare un medico prima di riprendere il lavoro.
- Usare accessori raccomandati dalla ARO.
- Ogni qualvolta la testa ad angolo viene installata o riposizionata, la leva di immissione deve essere posizionata in modo che la coppia di reazione non tenda a fermare il meccanismo di immissione nella posizione di inserimento "ON".
- Questo attrezzo non è stato progettato per operare in atmosfere esplosive.
- Questo attrezzo non è isolato contro le scosse elettriche.

AVVISO

L'uso di ricambi non originali ARO potrebbe causare condizioni di pericolosità, compromettere le prestazioni dell'attrezzo ed aumentare la necessità di manutenzione, inoltre potrebbe invalidare tutte le garanzie.

Le riparazioni devono essere effettuate soltanto da personale autorizzato e qualificato. Rivolgersi al più vicino centro di assistenza tecnica ARO Tool Products.

Per informazioni sulle parti di ricambio ed assistenza, contattare il distributore ARO.

ARO Tool Products**Ingersoll-Rand Company**

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131
• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY Stampato in U.S.A.








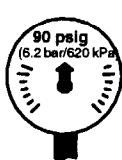

ARO

Parte della Ingersoll-Rand Mondiale

IDENTIFICAZIONE DELLE ETICHETTE DI AVVERTENZA

▲ AVVERTENZA

LA MANCATA OSSERVANZA DELLE SEGUENTI AVVERTENZE PUÒ CAUSARE LESIONI FISICHE.

	▲ AVVERTENZA Indossare sempre degli occhiali protettivi quando si adopera questo attrezzo o se ne esegue la manutenzione.		▲ AVVERTENZA Indossare sempre delle cuffie protettive quando si adopera questo attrezzo.		▲ AVVERTENZA Disinserire sempre l'alimentazione aria e staccare il relativo tubo, prima di installare, togliere o regolare qualsiasi accessorio, oppure prima di eseguire qualsiasi operazione di manutenzione dell'attrezzo.
	▲ AVVERTENZA Gli attrezzi pneumatici possono vibrare durante l'uso. Le vibrazioni, i movimenti ripetitivi o le posizioni scomode possono risultare dannosi per le mani e le braccia. Interrompere l'uso dell'attrezzo se si avvertono sintomi di disagio fisico, formicolio o dolore. Interpellare un medico prima di riprendere il lavoro.		▲ AVVERTENZA Non trasportare l'attrezzo tenendolo per il tubo.		▲ AVVERTENZA Non adoperare tubi e raccordi danneggiati, consumati o deteriorati.
	▲ AVVERTENZA Nell'usare l'attrezzo, mantenere con il corpo una posizione salda e ben bilanciata. Non sbilanciarsi durante l'uso di questo attrezzo.		▲ AVVERTENZA Lavorare con massima pressione aria di 90 psig (6,2 bar/620 kPa).	Etichette di avvertenza internazionali: Ordine Parte Nr. _____ 	

AVVERTENZA SPECIFICHE PER LEVIGATRICI

▲ AVVERTENZA

LA MANCATA OSSERVANZA DELLE SEGUENTI AVVERTENZE PUÒ CAUSARE LESIONI FISICHE.

- Non utilizzare questo attrezzo se la velocità libera effettiva supera il valore indicato sulla targhetta dei dati.
- Prima di montare un nastro per levigare, dopo una qualsiasi riparazione dell'attrezzo, oppure ogni qualvolta una levigatrice viene consegnata all'operatore per l'uso, controllare con un contagiri la velocità libera dell'attrezzo onde accertarsi che la sua velocità effettiva alla pressione di 90 psig (6,2 bar/620 kPa) non superi il valore in giri/min. Le levigatrici in uso sul luogo di lavoro devono essere sottoposte a un controllo analogo almeno ad ogni turno di lavoro.
- Usare sempre la cuffia di protezione ARO consigliata, fornita insieme alla levigatrice.
- Le levigatrici ad angolo a nastro serie GR03A-12 hanno una velocità libera di 12 000 giri/min. ed una velocità del nastro di 2 700 sfpm mentre le levigatrici ad angolo a nastro serie GR03A-20 hanno una velocità libera di 20 000 giri/min. ed una velocità del nastro di 4 500 sfpm, quando vengono azionate ad una pressione d'aria di 90 psig (6,2 bar/620 kPa). Operazione a pressione d'aria maggiore causerà eccessiva velocità.
- Non azionare una levigatrice a nastro con il coperchio rimosso.

REGOLAZIONI

INSTALLAZIONE DI UN NASTRO PER LEVIGARE

Quando si installa un nuovo nastro per levigare, procedere nel modo seguente:

1. Per i modelli di 18", far scorrere il coperchio verso la parte posteriore verso l'impugnatura della levigatrice fino a quando sia libero. Potrebbe essere necessario un leggero colpo sull'orlo anteriore del coperchio per sganciarlo dai punti di posizionamento.
2. Comprimere la ruota di rinvio e sfilare il vecchio nastro dal collare dell'attacco. Rilasciare la pressione sulla ruota di rinvio e togliere il nastro.
3. Posizionare un nuovo nastro sulla ruota di rinvio.
4. Comprimere la ruota di rinvio con il nastro e slittare le estremità opposte del collare dell'attacco attorno al coperchio del mandrino. Rilasciare la pressione sulla ruota di rinvio.
5. Per i modelli di 18", allineare il coperchio con la cuffia di protezione e sfilarlo in avanti verso la ruota di rinvio fino a quando si aggancia in posizione e ci rimane.
6. Azionare la levigatrice a bassa velocità per determinare se il nuovo nastro funziona bene. Se il nastro non funziona correttamente, riallineare la staffa d'attacco serrando o allentando una o entrambe le viti di montaggio della staffa stessa.

MESSA IN SERVIZIO DELL'ATTREZZO

— FUNZIONAMENTO DELL'ATTREZZO —

Levigare usando qualsiasi porzione esposta del nastro di levigatura. Per ottenere i migliori risultati, levigare quella porzione del nastro che la ruota di trasmissione sta tirando.

LUBRIFICAZIONE



IRAX Nr. 10P
IRAX Nr. 50P
IRAX Nr. 63Z4

IRAX Nr. 67 1LB
IRAX Nr. 68 1LB
IRAX Nr. 77 1LB

Con questi attrezzi usare sempre un lubrificatore di linea. Si raccomanda l'uso del seguente gruppo filtro-regolatore-lubrificatore:

Internazionale – IRAX Nr. C26–C4–A29

Dopo ogni due ore di funzionamento, se non viene usato un lubrificatore di linea, iniettare da 1/2 a 1 cc di olio IRAX Nr. 10P nell'entrata aria.

Dopo ogni otto ore di funzionamento, iniettare circa 1/2 cc di grasso IRAX Nr. 67 1LB oppure IRAX Nr. 77 1LB nell'ingrassatore della testa ad angolo.

Una lubrificazione eccessiva determinerà l'accumulo di grasso attorno all'albero.

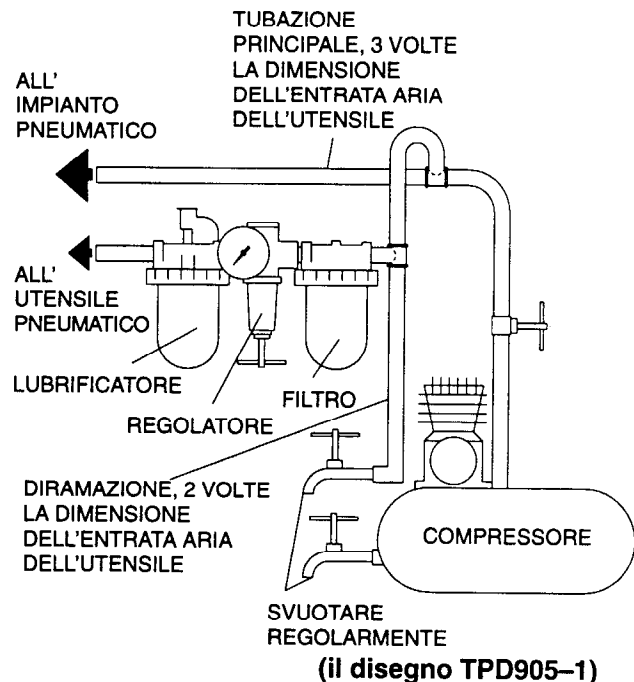
Ogni qualvolta si installa un nuovo stoppino, saturarlo completamente con circa 1–1/2 cc d'olio IRAX Nr. 63Z4.

Non sostituire con altro olio.

Ogni qualvolta si smonta il motore, togliere il vecchio grasso e riempire la cavità dietro il cuscinetto posteriore del rotore con 3/4 cc di grasso IRAX Nr. 68 1LB.

ATTENZIONE

Non contrassegnare alcuna superficie non metallica di questo attrezzo con i codici di identificazione del cliente. Ciò potrebbe compromettere le prestazioni dell'attrezzo.



SPECIFICA

Modello	Dimensione nastro in (mm)	Velocità albero giri/min	Velocità nastro sfpm	•Livello di rumorosità dB (A)		◆ Livello di vibrazione m/s ²
				Pressione	Potenza	
GR03A-12RB-3-LP-EU	12 x 1/2 (305 x 13)	12 000	2 700	79,1	---	0,53
GR03A-20RB-3-LP-EU	12 x 1/2 (305 x 13)	20 000	4 500	81,4	---	0,6

- Collaudato in conformità con ANSI S5.1-1971 a velocità libera
- ◆ Collaudato in conformità con ISO8662-1 levigatura su pezzo di lavorazione in acciaio

DICHIARAZIONE DI CONFORMITÀ

Noi Ingersoll-Rand, Co.
(nome del fornitore)

Swan Lane, Hindley Green, Wigan WN2 4EZ
(indirizzo)

dichiariamo sotto la nostra unica responsabilità che il prodotto,

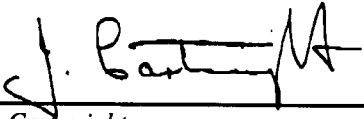
Levigatrici a nastro serie GR03A-EU

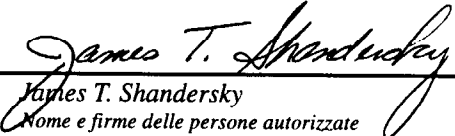
a cui si riferisce la presente dichiarazione è conforme alle normative delle direttive:

CEE 89/392, CEE 91/368, CEE 93/44 E CEE 93/68

secondo i seguenti standard: ISO8662

Gamma Nr. di serie (1996 →) XUA XXXXX →


J. Cartwright
Nome e firme delle persone autorizzate


James T. Shandersky
Nome e firme delle persone autorizzate

Giugno, 1996
Data

Giugno, 1996
Data

AVVISO

CONSERVARE QUESTE ISTRUZIONI. NON DISTRUGGERLE.

Quando l'attrezzo è diventato inutilizzabile, si raccomanda di smontarlo, sgrassarlo e separare i componenti secondo i materiali in modo da poterli riciclare.



LIJADORAS DE CORREA ANGULARES DE LA SERIE GR03A-EU

NOTA

Las lijadoras de correa de la serie GR03A-EU están diseñadas para trabajos en la industria de fabricación de productos metálicos y en aplicaciones de fundición. Estas pequeñas lijadoras de correa angulares resultan muy eficaces para amolar cordones de soldadura, líneas de rebabas y escoria, obteniendo un acabado fino.

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

⚠ 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, inspeccione y mantenga esta herramienta siempre de acuerdo con todas las normativas locales y nacionales que se apliquen a las herramientas neumáticas de utilización manual o que se sujeten con la mano.
- 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 8 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 de la herramienta podrían seguir girando brevemente después de haberse soltado la palanca de 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 ARO recomendados.
- Cuando se instale o reposicione la cabeza angular, la palanca de mando deberá colocarse de forma que la reacción de par no tienda a retener el mando en la posición de "ON" (ACCIONAMIENTO).
- 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 pieza ARO 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 ARO Tool Products más próximo.

Por información sobre piezas y servicio, sírvase ponerse en contacto con el distribuidor ARO de su zona.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131 •

FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY Impreso en EE.UU.








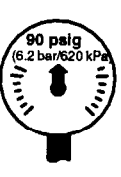



ARO

Parte del grupo mundial Ingersoll-Rand

ETIQUETAS DE AVISO

⚠ AVISO

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

	⚠ ADVERTENCIA Usar siempre protección ocular al manejar o realizar operaciones de mantenimiento en esta herramienta.		⚠ ADVERTENCIA Usar siempre protección para los oídos al manejar esta herramienta.		⚠ ADVERTENCIA 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.
	⚠ ADVERTENCIA Las herramientas neumáticas pueden vibrar durante el uso. La vibración, los movimientos repetitivos o las posiciones incómodas podrían dañar 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.		⚠ ADVERTENCIA No coger la herramienta por la manguera para levantarla.		⚠ ADVERTENCIA No utilizar mangueras de aire y accesorios dañados, desgastados ni deteriorados.
	⚠ ADVERTENCIA Mantener una postura del cuerpo equilibrada y firme. No estirar demasiado los brazos al manejar la herramienta.		⚠ ADVERTENCIA Manejar la herramienta a una presión de aire máxima de 90 psig (6,2 bar/620 kPa).	Etiqueta de Aviso Internacional: Pida Pieza No. _____   	

AVISOS ESPECÍFICOS SOBRE LAS LIJADORAS

⚠ AVISO

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

- No use esta herramienta si la velocidad en vacío real excede la indicada en la placa de identificación.
- Antes de montar una correa de lijado, después cualquier reparación de la herramienta o al poner en servicio una lijadora, compruebe con un tacómetro la velocidad en vacío de la herramienta para asegurarse de que su velocidad real a 90 psig (6.2 bar/620 kPa) no exceda la velocidad estampada o impresa en la placa de identificación. Las lijadoras que están en uso también se deberán revisar al menos una vez en cada turno de trabajo.
- Use siempre el protector recomendado por ARO y suministrado con la lijadora.
- Las lijadoras de correa de la serie GR03A-12 tienen una velocidad en vacío de 12000 rpm y una velocidad periférica de correa de 2700 pies/min., mientras que las lijadoras de correa angulares de la serie GR03A-20 tienen una velocidad en vacío de 20000 rpm y una velocidad periférica de correa de 4500 pies/min., cuando se operan a una presión de aire de 90 psig (6.2 bar/620 kPa). Su utilización a una presión superior producirá un exceso de velocidad.
- No utilice la lijadora de correa sin la cubierta.

AJUSTES

-INSTALACIÓN DE UNA CORREA DE LIJADO

Para instalar una correa de lijado nueva, proceda como sigue:

1. Para modelos de 18 pulg., deslice la cubierta hacia atrás, hacia la empuñadura de la lijadora, hasta que quede suelta. Puede que sea necesario golpear ligeramente el extremo delantero de la cubierta para soltarla de los puntos de cierre.
2. Comprima la rueda intermedia y deslice la correa antigua fuera del manguito de accionamiento. Libere la presión de la rueda intermedia y saque la correa.
3. Coloque una correa nueva en la rueda intermedia.
4. Comprima la rueda intermedia con la correa y deslice el extremo opuesto de dicha correa sobre el manguito de accionamiento, alrededor de la tapa del husillo. Libere la presión sobre la rueda intermedia.
5. Para modelos de 18 pulg., alinee la cubierta con el protector y deslícela hacia delante, hacia la rueda intermedia, hasta que salte a su posición y se quede allí.
6. Utilice la lijadora a baja velocidad para ver si la correa nueva funciona con normalidad. Si la correa no funciona debidamente, vuelva a alinear la horquilla apretando o aflojando para ello uno de los tornillos de montaje de la horquilla o ambos.

PARA PONER LA HERRAMIENTA EN SERVICIO

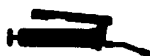
FUNCIONAMIENTO DE LA HERRAMIENTA

Proceda al lijado utilizando para ello cualquier parte de la correa de lijado que quede expuesta. Para obtener unos resultados óptimos, lije utilizando la parte de la correa de la que tira la muela de accionamiento.

LUBRICACIÓN



IRAX N° 10P
IRAX N° 50P
IRAX N° 63Z4



IRAX N° 67 1LB
IRAX N° 68 1LB
IRAX N° 77 1LB

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

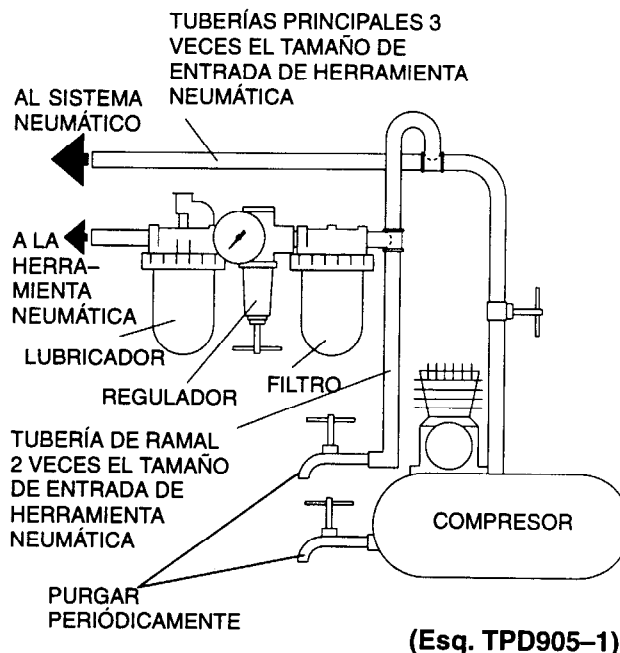
Internacional – IRAX N° C26-C4-A29

Después de cada dos horas de funcionamiento, si no se usa un lubricador de línea de aire comprimido, inyecte 1/2 – 1 cc de aceite IRAX N° 10P en la admisión de aire. Después de cada ocho horas de uso, inyecte aproximadamente 1/2 cc de grasa IRAX N° 67 1LB o 77 1LB en el engrasador situado en la cabeza angular. Un exceso de lubricación causará que caiga grasa en el eje. Siempre que se instale una mecha nueva, satúrela bien con 1-1/2 cc de aceite IRAX N° 63Z4. No sustituya con ningún otro aceite.

Siempre que se desmonte el motor, saque la grasa usada y vuelva a llenar la cavidad situada detrás del rodamiento del rotor trasero con 3/4 cc de grasa IRAX N° 68 1LB.

PRECAUCIÓN

No marque ninguna superficie no metálica de esta herramienta con los códigos de identificación de cliente. Tal acción podría afectar al rendimiento de la herramienta.



(Esq. TPD905-1)

ESPECIFICACIONES

Modelo	Tamaño de la correa	Velocidad del eje	Velocidad periférica de la correa	■ Nivel de ruido dB (A)		◆ Nivel de vibraciones
				Presión	Potencia	
GR03A-12RB-3-LP-EU	12 x 1/2 (305 x 13)	12000	2700	79,1	---	0,53
GR03A-20RB-3-LP-EU	12 x 1/2 (305 x 13)	20000	4500	81,4	---	0,6

- Comprobado conforme a la norma ANSI S5.1-1971 a la velocidad en vacío
- ◆ Comprobado conforme a la norma ISO8662-1 al lijar una pieza de acero

DECLARACIÓN DE CONFORMIDAD

Los abajo firmantes Ingersoll-Rand, Co.
(nombre del proveedor)

 Swan Lane, Hindley Green, Wigan WN2 4EZ
(domicilio)

declaramos que, bajo nuestra responsabilidad exclusiva, el producto:

 Lijadoras de Correa Angulares de la Serie GR03A-EU

a los que se refiere la presente declaración, cumplen con todo lo establecido en las directivas:

 CEE 89/392, CEE 91/368, CEE 93/44 Y CEE 93/68

conforme a las siguientes normas: ISO8662

Gama de No. de Serie: (1996 →) XUA XXXXX →

 J. Cartwright
J. Cartwright
Nombre y firma de las personas autorizadas

 James T. Shandersky
James T. Shandersky
Nombre y firma de las personas autorizadas

 Junio, 1996
Fecha

 Junio, 1996
Fecha

NOTA

GUARDE ESTAS INSTRUCCIONES. NO LAS DESTRUYA.

Una vez vencida la vida útil de la herramienta, se recomienda desmontar la herramienta, desengrasarla y separar las piezas según el material de fabricación para que puedan ser recicladas.

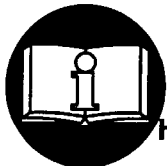
TYPE GR03A-EU HAAKSE BANDSCHUURMACHINES

LET WEL

Het Type GR03A-EU Haakse Bandschuurmachine is bedoeld voor werk in de metaalverwerkende industrie en metaalgieterijen. Deze kleine Haakse Bandschuurmachines zijn uitermate efficiënt bij het wegschuren van lasrupsen, slakken en scheidingslijnen en zorgen gelijk voor een mooie afwerking.

ARO is niet aansprakelijk voor door de klant aangebrachte veranderingen aan de gereedschappen voor toepassingen waarover met ARO geen voorafgaand overleg werd gepleegd.

⚠ WAARSCHUWING



BELANGRIJKE VEILIGHEIDSINFORMATIE IS INGESLOTEN. EERST DIT HANDBOEK LEZEN, DAN HET GEREEDSCHAP BEDIENEN. HET BEHOORT TOT DE VERANTWOORDELIJKHEID VAN DE WERKGEVER DE IN DIT HANDBOEK GEGEVEN INFORMATIE AAN DE GEBRUIKER TER HAND TE STELLEN. NALATEN DE HIERNAVOLGENDE WAARSCHUWINGEN OP TE VOLGEN KAN LICHAMELIJK LETSEL TOT GEVOLG HEBBEN.

INGEBRUIKNAME VAN HET GEREEDSCHAP

- Dit gereedschap altijd bedienen, controleren en onderhouden in overeenstemming met alle voorschriften (plaatselijk, staat, federaal en land), die betrekking hebben op hand-gehouden/hand-bediende pneumatische gereedschappen.
- Voor veiligheid, topprestatie, en maximale bestendigheid van de onderdelen dit gereedschap laten werken bij een maximale luchtdruk van 90 psig (6.2 bar/ 620 kPa) bij de inlaat met een luchttoevoerslang, die een inwendige diameter van 5/16" (8 mm) heeft.
- Men dient te allen tijde de luchtinlaat af te sluiten en de luchttoevoerslang te ontkoppelen voordat enig deel aan dit gereedschap wordt aangebracht, verwijderd of afgesteld, of voordat enig onderhoud aan dit gereedschap mag worden uitgevoerd.
- Geen beschadigde, gerafelde of versleten luchtslangen of fittingen gebruiken.
- Zorg ervoor dat alle slangen en fittingen de juiste afmetingen hebben en goed zijn vastgemaakt. Zie tekening TPD905-1 voor een typisch leidingnet.
- Altijd schone, droge lucht gebruiken bij een maximum luchtdruk van 90 psig (6.2 bar/620 kPa). Stof, corrosiverende uitwasemingen en/of te grote vochtigheid kunnen de motor van een drukluchtgereedschap ruïneren.
- De gereedschappen niet smeren met ontvlambare of vluchtige vloeistoffen als petroleum, diesel of (straal) vliegtuigbrandstoffen.
- Geen typeplaatjes verwijderen. Beschadigde typeplaatjes moeten worden vervangen.

GEBRUIK VAN HET GEREEDSCHAP

- U moet te allen tijde oogbeschermers dragen wanneer u dit gereedschap bedient of er onderhoudswerkzaamheden aan uitvoert.

- Altijd oorbeschermers dragen wanneer dit gereedschap wordt bediend.
- Houd handen, losse kleding of lang haar weg van het draaiende eind van het gereedschap.
- Let op en anticipeer op plotselinge veranderingen in de werking van enig persluchtgereedschap zowel tijdens de start als gedurende het in bedrijf zijn.
- Steeds in een goede houding staan. Als u het gereedschap bedient mag u zich niet te ver uitstrekken. Hoge reactiekoppels kunnen voorkomen bij of beneden de aanbevolen luchtdruk.
- De hulpstukken van het gereedschap kunnen even blijven draaien nadat de bediening is losgelaten.
- Persluchtgereedschappen kunnen tijdens gebruik ervan trillen. Trillingen, zich herhalende bewegingen, of ongemakkelijke houdingen kunnen schadelijk zijn voor uw handen en armen. Stop met bediening van enig gereedschap wanneer u ongemak, een tintelend gevoel of pijn ervaart. Zoek medisch advies alvorens het werk te hervatten.
- Uitsluitend de door ARO aanbevolen bijbehorende hulpstukken gebruiken.
- Onverschillig of de Haakse Kop wordt geïnstalleerd of weer op zijn plaats wordt teruggebracht de Regelhendel moet zo worden geplaatst dat een reactiekoppel de regelaar niet in de "ON" (aan) stand zal vasthouden.
- Dit gereedschap is niet ontworpen om er mee in explosieve omgevingen te werken.
- Dit gereedschap is niet geïsoleerd tegen elektrische schokken.

LET WEL

Het gebruiken van andere dan originele ARO onderdelen kan gevaar opleveren voor de veiligheid, en een vermindering met zich brengen van het prestatievermogen van het gereedschap en een toeneming van het onderhoud ervan; het kan een vervallen van alle garantie-bepalingen tot gevolg hebben.

Reparaties mogen uitsluitend worden uitgevoerd door hiertoe gemachtigd en geschoold personeel. Raadpleeg uw dichtstbijzijnde erkende ARO Tool Servicerter.

Voor onderdelen en onderhoudsinformatie verzoeken wij u contact op te nemen met uw lokale ARO dealer.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY Gedrukt in U.S.A.

ARO


Onderdeel van wereldomspannend Ingersoll-Rand


LABELS MET WAARSCHUWINGSINSTRUCTIES


⚠ WAARSCHUWING


NALATEN DE HIERNAVOLGENDE WAARSCHUWINGEN OP TE VOLGEN KAN LICHAMELIJK LETSEL TOT GEVOLG HEBBEN.

	⚠ WAARSCHUWING U moet te allen tijde oogbeschermers dragen wanneer u dit gereedschap bedient of er onderhoudswerkzaamheden aan uitvoert.
---	--

	⚠ WAARSCHUWING Altijd oorbeschermers dragen wanneer dit gereedschap wordt bediend.
---	--


	⚠ WAARSCHUWING Men dient te allen tijde de luchtinlaat af te sluiten en de luchttoevoerslang te ontkoppelen voordat enig deel aan dit gereedschap wordt aangebracht, verwijderd of afgesteld, of voordat enig onderhoud aan dit gereedschap mag worden uitgevoerd.
---	--

	⚠ WAARSCHUWING Persluchtgereedschappen kunnen tijdens gebruik ervan trillen. Trillingen, zich herhalende bewegingen, of ongemakkelijke houdingen kunnen schadelijk zijn voor uw handen en armen. Stop met bediening van enig gereedschap wanneer u ongemak, een tintelend gevoel of pijn ervaart. Zoek medisch advies alvorens werk te hervatten.
---	---




	⚠ WAARSCHUWING Het gereedschap niet aan de slang dragen.
---	--

	⚠ WAARSCHUWING Geen beschadigde, gerafelde of versleten luchtslangen of fittingen gebruiken.
---	--

	⚠ WAARSCHUWING Steeds in een goede houding staan. Als u het gereedschap bedient mag U zich niet te ver uitstrekken.
---	---

	⚠ WAARSCHUWING Bedienen tot een maximum luchtdruk van 90 psig (6.2 bar/620 kPa).
---	--

Internationale waarschuwingslabel:
Bestel onderdeel nr. _____

		
---	---	---

SPECIFIEKE WAARSCHUWINGEN VOOR SCHUURMACHINES

⚠ WAARSCHUWING

NALATEN DE HIERNAVOLGENDE WAARSCHUWINGEN OP TE VOLGEN KAN LICHAMELIJK LETSEL TOT GEVOLG HEBBEN.

- U mag dit gereedschap niet gebruiken wanneer het onbelaste toerental het rpm op het naamplaatje overschrijdt.
- Wanneer enig gereedschap is gerepareerd, of wanneer een Schuurmachine in gebruik wordt gegeven dan moet, voordat een schuurband wordt aangebracht, eerst met een tachometer het onbelast toerental worden gecontroleerd om er zeker van te zijn dat het feitelijk toerental bij 90 psig (6.2 bar/620 kPa) het in de naamplaat gestampte of op de naamplaat gedrukte rpm niet te boven zal gaan. Schuurmachines, die op het werk worden gebruikt, moeten tijdens elke werkgang tenminste een maal op gelijke wijze worden gecontroleerd.
- U moet te allen tijde de ARO Beveiliging gebruiken die met de Schuurmachine wordt meegeleverd.
- Wanneer ze bij een luchtdruk van 90 psig (6.2 bar/620 kPa) werken heeft het Type GR03A-12 Haakse Bandschuurmachines een onbelast toerental van 12 000 rpm en een bandsnelheid van 2 700 vierkante voet per minuut, terwijl het Type GR03A-20 Haakse Bandschuurmachines een onbelast toerental heeft van 20 000 rpm en een bandsnelheid van 4 500 vierkante voet per minuut. Het laten werken bij een hogere druk zal resulteren in een te hoog toerental.
- De Bandschuurmachine niet gebruiken wanneer de Beveiliging is verwijderd.

AFSTELLEN

HET AANBRENGEN VAN EEN SCHUURBAND

Een nieuwe schuurband wordt als volgt aangebracht:

1. Voor de 18" typen, schuif de Afdekking zover achteruit in de richting van de hendel van de Schuurmachine tot deze vrij is. Het kan nodig zijn een lichte tik op de voorste rand van de Afdekking te geven om het uit zijn borgpunten los te krijgen.
2. Druk de Draagrol in en slip de oude band van de Aandrijfhuil. Hef daarna de druk op de Draagrol op en verwijder de band.
3. Breng nu een nieuwe band de Draagrol aan.
4. Druk de Draagrol met de band in en slip de andere kant van de band rond de Afsluitdop voor de Spil en over de Huil voor de Aandrijving. Hef de druk op de Draagrol op.
5. Voor de 18" typen, breng de afdekking in één lijn met de Beveiliging en schuif hem zover naar voren in de richting van de Draagrol tot hij op zijn plaats klikt en daar blijft.
6. Laat de Schuurmachine langzaam lopen om vast te stellen of de nieuwe Band goed spoort. Wanneer de Band niet goed spoort de Trekhaak weer in lijn brengen, dit doet u via een vaster/losser draaien van een of beide Montageschroeven van de Trekhaak.

INGEBRUIKNEMING VAN HET GEREEDSCHAP

— WERKING VAN HET GEREEDSCHAP —

Op elk deel van de vrijliggende Schuurband moet zand worden gebruikt. Voor het verkrijgen van de beste resultaten moet zand worden aangebracht op dat deel van de Band dat door de Draagrol wordt voortgetrokken.

DE SMERING



IRAX Nr. 10P
IRAX Nr. 50P
IRAX Nr. 63Z4



IRAX Nr. 67 1LB
IRAX Nr. 68 1LB
IRAX Nr. 77 1LB

Men moet bij deze gereedschappen steeds een in-lijn aangesloten drukluchtsmeerinrichting gebruiken. Wij bevelen u de volgende Filter-Smeerinrichting-Regeleenheid aan:

Internationaal – Nr. C26-C4-A29

Na elke twee bedrijfsuren, wanneer er geen in-lijn olienevelaar wordt gebruikt, 1/2 tot 1 cc IRAX Nr. 10P Olie in de Luchtinlaat spuiten.

Na elke acht bedrijfsuren, ongeveer 1/2 cc IRAX Nr. 67 1LB Vet of IRAX Nr. 77 1LB Vet in de Smeernippel voor de Haakse Kop spuiten. **Te veel smering zal vet afzetting op het werk rond de As veroorzaken.**

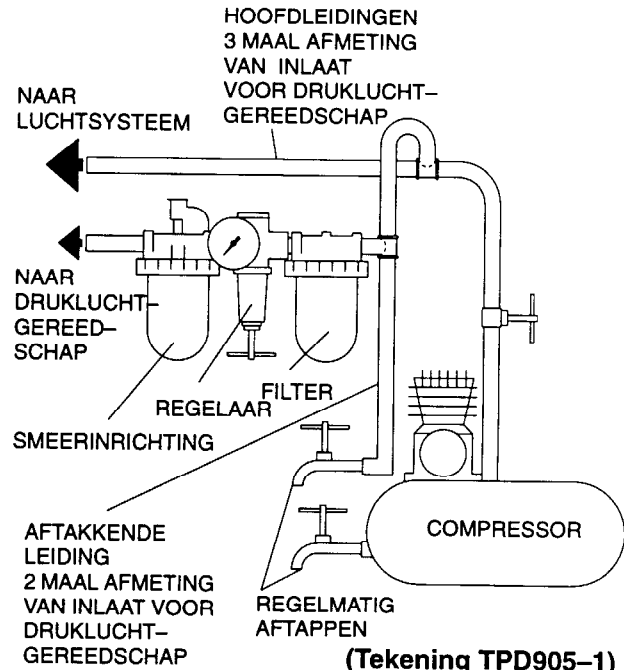
Steeds wanneer een nieuw Smeerkatoentje wordt aangebracht moet het Smeerkatoentje met ongeveer 1-1/2 cc IRAX Nr. 63Z4 Olie goed doordrenkt worden.

Niet door een andere olie vervangen.

Steeds wanneer de motor gedemonteerd wordt, het oude vet verwijderen en de ruimte achter het Achterste Rotorlager met 3/4 cc IRAX Nr. 68 1LB Vet opvullen.

OPPASSEN

U mag geen enkel niet-metaal oppervlak van dit gereedschap merken met een identificatiecode van de klant. Dit kan de prestatie van het gereedschap beïnvloeden.



SPECIFICATIES

Type	Afmeting band	Toerental as	Snelheid band	▪ Geluidsniveau dB (A)		♦ Trillingsniveau
	in (mm)	rpm	sfpn	Druk	Vermogen	m/s ²
GR03A-12RB-3-LB-EU	12 x 1/2 (305 x 13)	12 000	2 700	79.1	---	0.53
GR03A-20RB-3-LP-EU	12 x 1/2 (305 x 13)	20 000	4 500	81.4	---	0.6

- Getest overeenkomstig ANSI S5.1-1971 bij onbelast toerental
- ♦ Getest overeenkomstig ISO8662-1 staande op stalen werkstuk

SERIES GR03A ANGLE BELT SANDERS

NOTICE

Series GR03A Angle Belt Sanders are designed for work in the metal fabricating industry and foundry applications. These small Angle Belt Sanders are very efficient at grinding weld bead, slag and parting lines while leaving a fine finish.

ARO is not responsible for customer modification of tools for applications on which ARO 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 5/16" (8 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 rotate 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 ARO.
- Whenever the Angle Head is installed or repositioned, the Throttle Lever must be positioned so that reaction torque will not tend to retain the throttle in the "ON" position.
- 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 ARO 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 ARO Authorized Servicenter.

For parts and service information, contact your local ARO distributor, or the Customer Service Dept. of the Ingersoll-Rand Distribution Center, White House, TN at PH: (615) 672-0321, FAX: (615) 672-0801.









ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North • P.O. Box 8000 • Southern Pines, NC 28388-8000
©1998 INGERSOLL-RAND COMPANY • PRINTED IN U.S.A.

▲ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

	▲ WARNING Always wear eye protection when operating or performing maintenance on this tool.		▲ WARNING Always wear hearing protection when operating this tool.		▲ 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.
	▲ WARNING 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.		▲ WARNING Do not carry the tool by the hose.		▲ WARNING Do not use damaged, frayed or deteriorated air hoses and fittings.
	▲ WARNING Keep body stance balanced and firm. Do not overreach when operating this tool.		▲ WARNING Operate at 90 psig (6.2 bar/620 kPa) Maximum air pressure.		

SANDER SPECIFIC WARNINGS

▲ WARNING

FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

- Do not use this tool if actual free speed exceeds the nameplate rpm.
- Before mounting a sanding belt, after any tool repair or whenever a Sander is issued for use, check free speed of the tool with a tachometer to make certain its actual speed at 90 psig (6.2 bar/620 kPa) does not exceed rpm stamped or printed on the nameplate. Sanders in use on the job must be similarly checked at least once each shift.
- Always use the recommended ARO Guard furnished with the Sander.
- Do not operate a Belt Sander with the Cover removed.

ADJUSTMENTS

— INSTALLING A SANDING BELT —

When installing a new sanding belt, proceed as follows:

1. For 18" models, slide the Cover rearward toward the handle of the Sander until it is free. It may require a light rap on the front edge of the Cover to disengage it from its locking points.
2. Compress the Idler Wheel and slip the old belt off the drive Sleeve. Release the pressure on the Idler Wheel and remove the belt.
3. Position a new belt on the Idler Wheel.
4. Compress the Idler Wheel with the belt and slip the opposite end of the belt onto the Drive Sleeve around the Spindle Cap. Release the pressure on the Idler Wheel.
5. For 18" models, align the Cover with the Guard and slide it forward toward the Idler Wheel until it snaps into position and stays there.
6. Operate the Sander at low speed to determine if the new Belt is tracking properly. If the Belt fails to track properly, realign the Clevis by tightening or loosening one or both of the Clevis Mounting Screws.

TOOL OPERATION

Sand using any portion of the exposed Sanding Belt. For best results, sand on that portion of the Belt being pulled by the Drive Wheel.

LUBRICATION



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

Always use an air line lubricator with these tools. We recommend the following Filter-Lubricator-Regulator Unit:

For USA - IRAX No. C22-04-600

After each two hours of operation, if an air line lubricator is not used, inject 1/2 to 1 cc of IRAX No. 10P Oil into the Air Inlet.

After each eight hours of operation, inject approximately 1/2 cc of IRAX No. 67 1LB or IRAX No. 77 1LB Grease into the Angle Head Grease Fitting. Excessive lubrication will cause grease to work out around the Arbor.

Whenever a new Wick is installed, thoroughly saturate the Wick with approximately 1-1/2 cc of IRAX No. 63Z4 Oil.

Do not substitute any other oil.

Whenever the motor is disassembled, remove the old grease and refill the cavity behind the Rear Rotor Bearing with 3/4 cc of IRAX No. 68-1LB Grease.

CAUTION

Do not mark nonmetallic surface of this tool with customer identification codes. Such action could affect tool performance.

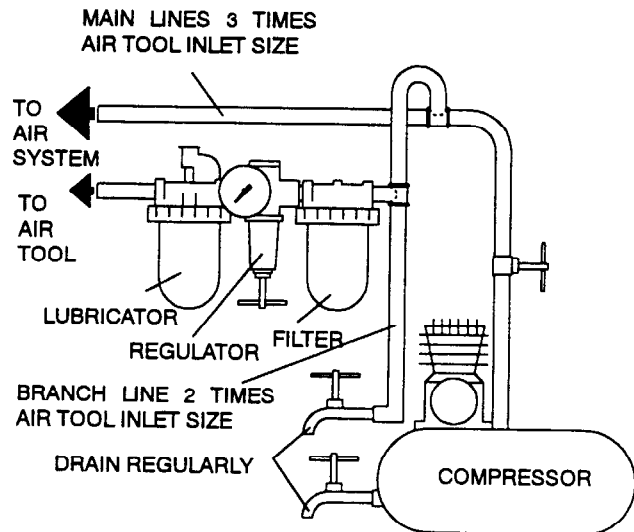
INSTALLATION

Air Supply and Connections

Always use clean, dry air at 90 psig. maximum air pressure. 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 Dwg. TPD905-1 for a typical piping arrangement.



(Dwg. TPD905-1)

HOW TO ORDER SERIES GR03A ANGLE BELT SANDERS

ANGLE BELT SANDERS WITH 12" x 1/2" BELT		
Model	Arbor Speed rpm	Belt Speed sfpm
GR03A-20RB-3 (Rear Exhaust)	20 000	4 500
GR03A-12RB-3 (Rear Exhaust)	12 000	2 700
ANGLE BELT SANDERS WITH 18" x 1/4" BELT		
GR03A-20RB-5 (Rear Exhaust)	20 000	4 500
GR03A-12RB-5 (Rear Exhaust)	12 000	2 700
ANGLE BELT SANDERS WITH 18" x 1/2" BELT		
GR03A-20RB-4 (Rear Exhaust)	20 000	4 500
GR03A-12RB-4 (Rear Exhaust)	12 000	2 700

NOTICE

Any model listed can be changed to a front exhaust tool by reversing the Flow Ring and aligning the indicator marks with the letter "F" on the Housing. To order a front exhaust tool from the factory, substitute the letter "F" for the letter "R" in the model number. Example: GH03A-20RB-3Rear Exhaust Model becomes GH03A-20FB-3 Front Exhaust Model.

HOW TO ORDER CUSTOM MODELS

1. To order a tool with a Locking Lever, select the desired model and add an "-L" to the end of the existing number.
Example: GH03A-20B-3-L
2. To order a tool with a Low-Profile Concentric Flange, select the desired model and add a "-C" to the end of the existing number.
Example: GR03A-20B-3-C
3. To order a tool with a Low-Profile Concentric Flange, select the desired model and add a "-P" to the end of the existing number.
Example: GR03A-20B-3-P

NOTICE

To order a combination of options, add the required letters to the end of the model number in the following order: L or C, P, D.

Example: GR03A-20B-3-CPD
GR03A-20B-3-LP

NOTICE

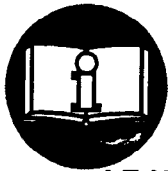
Anytime a tool is ordered with a Low-Profile Concentric Flange, it will come equipped with a Locking Lever from the factory.

PONCEUSES D'ANGLE À BANDE DE LA SÉRIE GR03A

NOTE

Les ponçuses d'angle à bande de la Série GR03A sont destinées aux applications de tôlerie et de fonderie. Ces petites ponçuses à bande sont particulièrement bien adaptées au polissage des cordons de soudure, du laitier et des jointures de moulage et laissent une très bonne finition. ARO 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 ARO.

▲ 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 8 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 gasol 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 rotation 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 ARO.
- A chaque fois que le renvoi d'angle est installé ou repositionné, le levier de commande doit être positionné de manière à ce que le couple de réaction n'ait pas tendance à maintenir le levier de commande en position "MARCHE".
- 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 ARO 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 ARO Tool Products le plus proche.

Pour les informations relatives aux pièces et au service, contactez votre distributeur ARO.

ARO Tool Products

Ingersoll-Rand Company









1725 U.S. No. 1 North, PO Box 8000, Southern Pines, NC 28388-8000

©1998 INGERSOLL-RAND COMPANY Imprimé aux E.U.

SIGNIFICATION DES ÉTIQUETTES D'AVERTISSEMENT

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

	ATTENTION Porter toujours des lunettes de protection pendant l'utilisation et l'entretien de cet outil.		ATTENTION Porter toujours une protection acoustique pendant l'utilisation de cet outil.		ATTENTION 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.
	ATTENTION 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'outil en cas d'inconfort, de picotements ou de douleurs. Consulter un médecin avant de recommencer à utiliser l'outil.		ATTENTION Ne pas transporter l'outil par son flexible.		ATTENTION Ne pas utiliser des flexibles ou des raccords endommagés, effilochés ou détériorés.
	ATTENTION Garder une position équilibrée et ferme. Ne pas se pencher trop en avant pendant l'utilisation de cet outil.		ATTENTION Utiliser de l'air comprimé à une pression maximum de 6,2 bar (620 kPa).		

AVERTISSEMENTS SPÉCIFIQUES AUX PONCEUSES

⚠ ATTENTION

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

- Ne pas utiliser cet outil si la vitesse à vide réelle dépasse celle indiquée sur la plaque signalétique.
- Avant de monter une bande de ponçage, après toute réparation de l'outil ou chaque fois que la ponceuse est sortie du magasin, vérifier la vitesse à vide de l'outil avec un compte-tours pour s'assurer qu'à une pression d'alimentation de 6,2 bar (620 kPa), elle ne dépasse pas celle poinçonnée ou imprimée sur la plaque signalétique. Les ponceuses sorties sur chantier doivent être vérifiées de la même façon au moins une fois par poste.
- Utiliser toujours la ponceuse équipée du carter de protection recommandé par ARO.
- Ne jamais exploiter la ponceuse lorsque le couvercle est déposé.

RÉGLAGES

— MONTAGE DE LA BANDE ABRASIVE —

Pour installer une nouvelle bande abrasive, procéder comme suit :

1. Pour les modèles de 18", glisser le couvercle vers l'arrière en direction de la poignée, jusqu'à ce qu'il soit libre. Un léger coup sur le devant du couvercle pourra être nécessaire pour le désengager de ses points de verrouillage.
2. Comprimer la roue libre et faire glisser l'ancienne bande du manchon d'entraînement. Relâcher la pression sur la roue libre et déposer la bande.
3. Placer une bande neuve sur la roue libre.
4. Comprimer la roue libre et la bande et faire glisser l'extrémité opposée de la bande sur le manchon d'entraînement autour du chapeau de broche. Relâcher la pression sur la roue libre.
5. Pour les modèles de 18", aligner le couvercle et le carter de protection et glisser le couvercle vers la roue libre jusqu'à ce qu'il s'engage en position.
6. Faire tourner la ponceuse à basse vitesse pour vérifier l'alignement correct de la bande. Si la bande n'est pas alignée, ajuster la chape en serrant ou en desserrant une ou les deux vis de montage de chape.

MISE EN SERVICE DE L'OUTIL

EXPLOITATION DE L'OUTIL

Poncer en utilisant n'importe quelle section exposée de la bande de ponçage. Pour obtenir les meilleurs résultats, utiliser la partie de la bande tractée par la roue d'entraînement.

LUBRIFICATION



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

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

International - IRAX No. C26-C4-A29

Toutes les deux heures de fonctionnement, si un lubrificateur de ligne n'est pas utilisé, injecter 1/2 à 1 cm³ d'huile IRAX No. 10P dans le raccord d'admission.

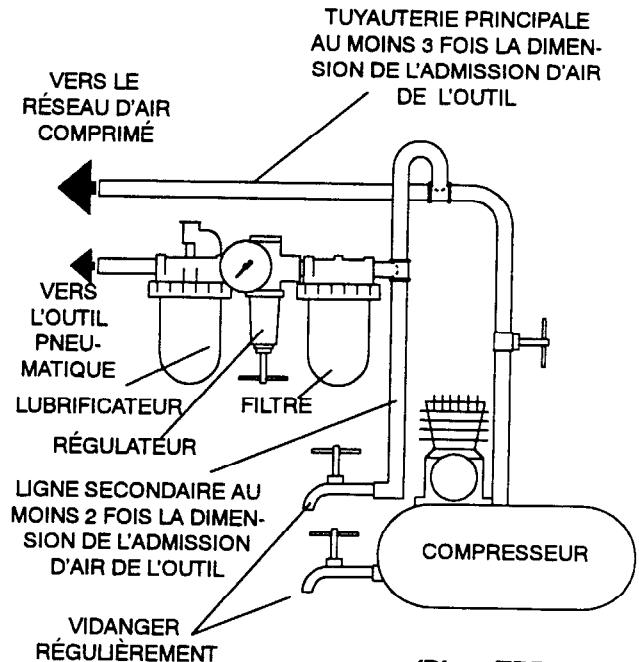
Toutes les huit heures de fonctionnement, injecter 1 cm³ de graisse IRAX No. 67 1LB ou IRAX No. 77 1LB dans le raccord de graissage du renvoi d'angle. **Tout graissage excessif causera l'extrusion de la graisse autour de l'arbre.**

A chaque fois qu'un nouveau feutre graisseur est installé, le saturer avec environ 1,5 cm³ d'huile IRAX No. 63Z4. **Ne pas utiliser d'autre huile.**

A chaque fois que le moteur est démonté, enlever la vieille graisse et remplir la cavité derrière le roulement arrière de rotor avec 0,75 cm³ d'huile IRAX No. 68 1LB.

AVERTISSEMENT

Ne pas marquer les codes d'identification client sur les surfaces non métalliques de cet outil. De telles actions pourraient affecter les performances de l'outil.

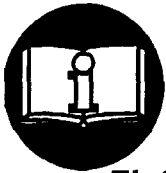


(Plan TPD905-1)

LIJADORAS DE CORREA ANGULARES DE LA SERIE GR03A**NOTA**

Las lijadoras de correa de la serie GR03A están diseñadas para trabajos en la industria de fabricación de productos metálicos y en aplicaciones de fundición. Estas pequeñas lijadoras de correa angulares resultan muy eficaces para amolar cordones de soldadura, líneas de rebabas y escoria, obteniendo un acabado fino.

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

▲ 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 8 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.

NOTA

El uso de piezas de recambio que no sean las auténticas piezas ARO 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 ARO Tool Products más próximo.

Pour les informations relatives aux pièces et au service, contactez votre distributeur ARO.

ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North, PO Box 8000, Southern Pines, NC 28388-8000

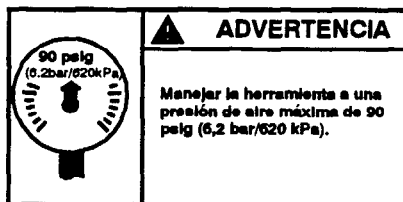
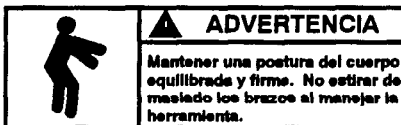
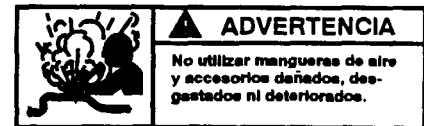
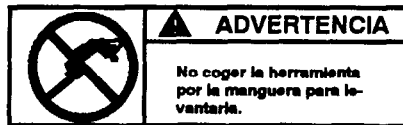
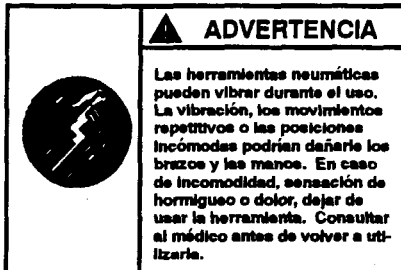
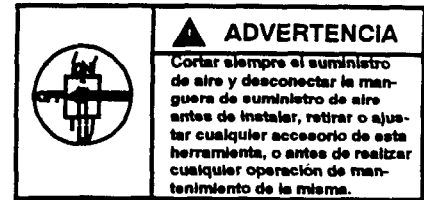
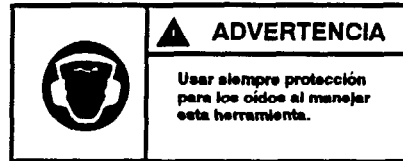
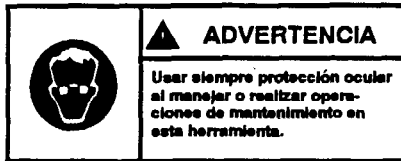
©1998 INGERSOLL-RAND COMPANY Impreso en EE.UU.

ARO

ETIQUETAS DE AVISO

⚠ AVISO

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



AVISOS ESPECÍFICOS SOBRE LAS LIJADORAS

⚠ AVISO

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

- No use esta herramienta si la velocidad en vacío real excede la indicada en la placa de identificación.
- Antes de montar una correa de lijado, después cualquier reparación de la herramienta o al poner en servicio una lijadora, compruebe con un tacómetro la velocidad en vacío de la herramienta para asegurarse de que su velocidad real a 90 psig (6.2 bar/620 kPa) no exceda la velocidad estampada o impresa en la placa de identificación. Las lijadoras que están en uso también se deberán revisar al menos una vez en cada turno de trabajo.
- Use siempre el protector recomendado por ARO y suministrado con la lijadora.
- No utilice la lijadora de correa sin la cubierta.

AJUSTES

-INSTALACIÓN DE UNA CORREA DE LIJADO

Para instalar una correa de lijado nueva, proceda como sigue:

1. Para modelos de 18 pulg., deslice la cubierta hacia atrás, hacia la empuñadura de la lijadora, hasta que quede suelta. Puede que sea necesario golpear ligeramente el extremo delantero de la cubierta para soltarla de los puntos de cierre.
2. Comprima la rueda intermedia y deslice la correa antigua fuera del manguito de accionamiento. Libere la presión de la rueda intermedia y saque la correa.
3. Coloque una correa nueva en la rueda intermedia.
4. Comprima la rueda intermedia con la correa y deslice el extremo opuesto de dicha correa sobre el manguito de accionamiento, alrededor de la tapa del husillo. Libere la presión sobre la rueda intermedia.
5. Para modelos de 18 pulg., alinee la cubierta con el protector y deslícela hacia delante, hacia la rueda intermedia, hasta que salte a su posición y se quede allí.
6. Utilice la lijadora a baja velocidad para ver si la correa nueva funciona con normalidad. Si la correa no funciona debidamente, vuelva a alinear la horquilla apretando o aflojando para ello uno de los tornillos de montaje de la horquilla o ambos.

PARA PONER LA HERRAMIENTA EN SERVICIO

FUNCIONAMIENTO DE LA HERRAMIENTA

Proceda al lijado utilizando para ello cualquier parte de la correa de lijado que quede expuesta. Para obtener unos resultados óptimos, lije utilizando la parte de la correa de la que tira la muela de accionamiento.

LUBRICACIÓN



IRAX Nº 10P
IRAX Nº 50P
IRAX Nº 63Z4



IRAX Nº 67 1LB
IRAX Nº 68 1LB
IRAX Nº 77 1LB

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

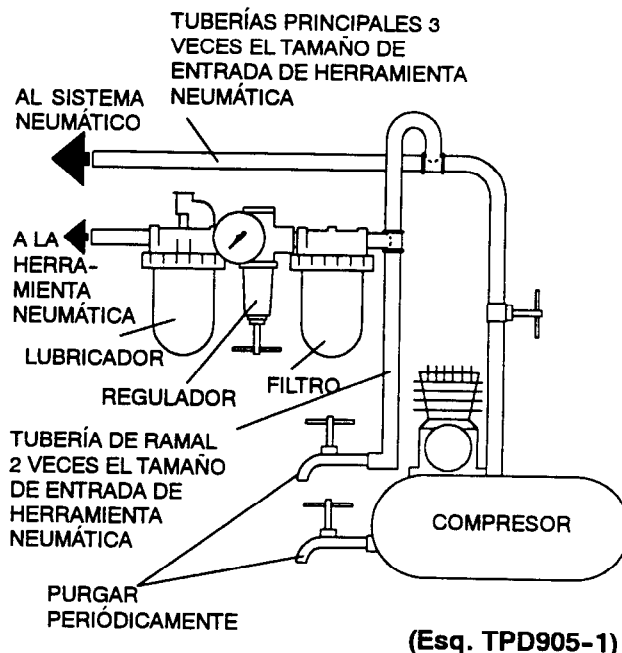
Internacional - IRAX Nº C26-C4-A29

Después de cada dos horas de funcionamiento, si no se usa un lubricador de línea de aire comprimido, inyecte 1/2 - 1 cc de aceite IRAX Nº 10P en la admisión de aire. Después de cada ocho horas de uso, inyecte aproximadamente 1/2 cc de grasa IRAX Nº 67 1LB o 77 1LB en el engrasador situado en la cabeza angular. Un exceso de lubricación causará que caiga grasa en el eje. Siempre que se instale una mecha nueva, satúrela bien con 1-1/2 cc de aceite IRAX Nº 63Z4. No sustituya con ningún otro aceite.

Siempre que se desmonte el motor, saque la grasa usada y vuelva a llenar la cavidad situada detrás del rodamiento del rotor trasero con 3/4 cc de grasa IRAX Nº 68 1LB.

PRECAUCIÓN

No marque ninguna superficie no metálica de esta herramienta con los códigos de identificación de cliente. Tal acción podría afectar al rendimiento de la herramienta.



LIXADORES COM CORREIA EM ÂNGULO SÉRIES GR03A

AVISO

Os Lixadores com Correia em Ângulo Séries GR03A são concebidos para aplicações de trabalho em indústria e fundição de metais. Estes pequenos Lixadores são muito eficientes em esmerilar cordões de solda, e linhas de separação e madeira, deixando um fino acabamento.

A ARO não é responsável por modificações, feitas pelo cliente em ferramentas, nas quais a ARO não tenha sido consultada.



▲ ADVERTÊNCIA

**INFORMAÇÃO DE SEGURANÇA IMPORTANTE EM ANEXO.
LEIA ESTE MANUAL ANTES DE OPERAR A FERRAMENTA.
É DA RESPONSABILIDADE DO EMPREGADOR COLOCAR A INFORMAÇÃO
DESTE MANUAL NAS MÃOS DO OPERADOR.**

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

- Sempre opere, inspecione 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, máximo desempenho e máxima durabilidade das peças, opere esta ferramenta com uma pressão de ar máxima de 6,2 bar/620 kPa (90 psig) na entrada da mangueira de alimentação de ar com diâmetro interno de 8 mm (5/16”).
- Desligue sempre a alimentação de ar e desconecte a mangueira de alimentação de ar antes de instalar, remover ou ajustar qualquer acessório nesta ferramenta, ou antes de executar qualquer serviço de manutenção nesta ferramenta.
- Não use mangueiras de ar ou adaptadores danificados, gastos ou deteriorados.
- Certifique-se de que todas as mangueiras e adaptadores sejam do tamanho correcto e estejam apertados com firmeza. Veja o Desenho TPD905-1 para um arranjo típico de tubagem.
- Use sempre ar seco e limpo com pressão máxima de 90 psig. Pó, fumos corrosivos e/ou humidade excessiva podem arruinar o motor de uma ferramenta pneumática.
- Não lubrifique as ferramentas com líquidos inflamáveis ou voláteis tais como querosene, diesel ou combustível de jactos.
- Não remova nenhum rótulo. Reponha qualquer rótulo danificado.

USANDO A FERRAMENTA

- Use sempre óculos de protecção quando estiver operando ou executando serviço de manutenção nesta ferramenta.
- Use sempre protecção contra ruído ao operar esta ferramenta.
- Mantenha as mãos, partes do vestuário soltas e cabelos compridos afastados da extremidade em rotação.
- Antecipe e esteja alerta a mudanças repentinas no movimento quando ligar e operar qualquer ferramenta motorizada.
- Mantenha a posição do corpo equilibrada e firme. Não exagere quando operar esta ferramenta. Torques de reacção elevados podem ocorrer na ou abaixo da pressão de ar recomendada.
- Os acessórios da ferramenta podem continuar a impactar brevemente após a pressão ter sido aliviada.
- Ferramentas accionadas pneumáticamente podem vibrar em uso. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser prejudiciais às mãos e aos braços. Pare de usar a ferramenta caso ocorra algum desconforto, sensação de formigamento ou dor. Procure assistência médica antes de retornar ao trabalho.
- Use acessórios recomendados pela ARO.
- Quando quer que o Cabeçote em Ângulo seja instalado ou repostado, a Válvula Reguladora de Pressão deve ser posicionada de modo que um torque de reacção não tenderá a reter o curso na posição “LIGADA”.
- Esta Ferramenta não foi concebida para trabalhos em atmosferas explosivas.
- Esta Ferramenta não está isolada contra choques eléctricos.

AVISO

O uso de peças de substituição que não sejam genuinamente da ARO podem resultar em riscos de segurança, diminuição do desempenho da ferramenta, aumento da necessidade de manutenção e pode invalidar todas as garantias.

As reparações devem ser feitas somente por pessoal treinado autorizado. Consulte o Centro de Serviços da ARO Tool Products mais próximo.

Para obter informações sobre peças e assistência, contacte o seu distribuidor local ARO.

ARO Tool Products

Ingersoll-Rand Company

1725 U.S. No. 1 North, PO Box 8000, Southern Pines, NC 28388-8000


1998 INGERSOLL-RAND COMPANY Impresso nos E.U.A.


ARO

IDENTIFICAÇÃO DO RÓTULO DE ADVERTÊNCIA


▲ ADVERTÊNCIA


O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

	▲ ADVERTÊNCIA Use sempre óculos de protecção quando estiver operando ou executando algum serviço de manutenção nesta ferramenta.
---	--


	▲ ADVERTÊNCIA Use sempre protecção contra o ruído ao operar esta ferramenta.
---	--


	▲ ADVERTÊNCIA Desligue sempre a alimentação de ar e desconecte a mangueira de alimentação de ar antes de instalar, remover ou ajustar qualquer acessório nesta ferramenta, ou antes de executar algum serviço de manutenção nesta ferramenta.
---	---

	▲ ADVERTÊNCIA Ferramentas accionadas pneumáticamente podem vibrar em uso. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser prejudiciais às mãos e aos braços. Pare de usar a ferramenta caso ocorra algum desconforto, sensação de formigamento ou dor. Procure assistência médica antes de retornar ao trabalho.
---	---

	▲ ADVERTÊNCIA Não carregue a ferramenta segurando na mangueira.
---	---

	▲ ADVERTÊNCIA Não use mangueiras de ar ou adaptadores danificados, gastos ou deteriorados.
---	--

	▲ ADVERTÊNCIA Mantenha a posição do corpo equilibrada e firme. Não exagere quando operar esta ferramenta. Torques de reacção elevados podem ocorrer sob a pressão de ar recomendada.
---	--

	▲ ADVERTÊNCIA Opere com pressão do ar Máxima de 90 psig (6,2-6,9 bar).
---	--

ADVERTÊNCIAS ESPECÍFICAS SOBRE O LIXADOR

▲ ADVERTÊNCIA

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

- Não use esta ferramenta se a velocidade livre total exceder a rpm indicada na placa de identificação.
- Antes de montar a correia de lixamento, depois de qualquer reparação de ferramenta ou quando se pretende que um Lixador seja colocado em funcionamento, verifique a velocidade livre do Lixador com um tacómetro para se certificar de que a sua velocidade real a 6,2 bar/620kPa (90 psig) não exceda a rpm selada ou impressa na placa de identificação. Os Lixadores em funcionamento devem ser similarmente verificados pelo menos uma vez em cada turno.
- Use sempre o Protector do Disco da ARO fornecido com o Lixador.
- Não opere o lixador com correia com a capa removida.

AJUSTES

— INSTALANDO UMA CORREIA DE LIXAMENTO —

Quando uma correia de lixamento nova for instalada proceda da seguinte maneira:

1. Para modelos com 18", deslize a Capa para trás em direção ao punho do Lixador até libertá-la. Pode ser necessário uma leve pancada na extremidade frontal da capa para livrá-lo dos seus pontos de travamento.
2. Comprima o Disco Falso e retire a correia velha para fora da Camisa de comando. Alivie a pressão no Disco Falso e remova a correia.
3. Posicione a correia nova no Disco Falso.
4. Comprima o Disco Falso com a correia e coloque a extremidade oposta da correia na Camisa de Comando ao redor do Tampo do Fuso. Alivie a pressão no Disco Falso.
5. Para modelos com 18", alinhe a Capa com o Protector e deslize para frente em direção do Disco Falso até que ele prenda na posição e lá permaneça.
6. Opere o Lixador com velocidade baixa para verificar se a nova Correia está propriamente colocada. Se a Correia não correr no trilho de maneira apropriada, realinhe o Olhal ao apertar ou afrouxar um ou ambos Parafusos de Montagem do Olhal.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

— OPERAÇÃO DA FERRAMENTA —

Lixe usando qualquer porção da Correia de Lixamento exposta. Para resultados melhores, lixe naquela porção da Correia sendo puxada pelo Disco de Comando.

— LUBRIFICAÇÃO —



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

Use sempre um lubrificador de ar de linha com estas ferramentas. Nós recomendamos a seguinte Unidade Filtro-Lubrificador-Regulador:

Para Internacional - IRAX No. C26-C4-A29

Depois de cada duas horas de operação, se um lubrificador de ar de linha não estiver sendo usado, injecte de 1/2 a 1 cc de Óleo IRAX No. 10P na Entrada de Ar.

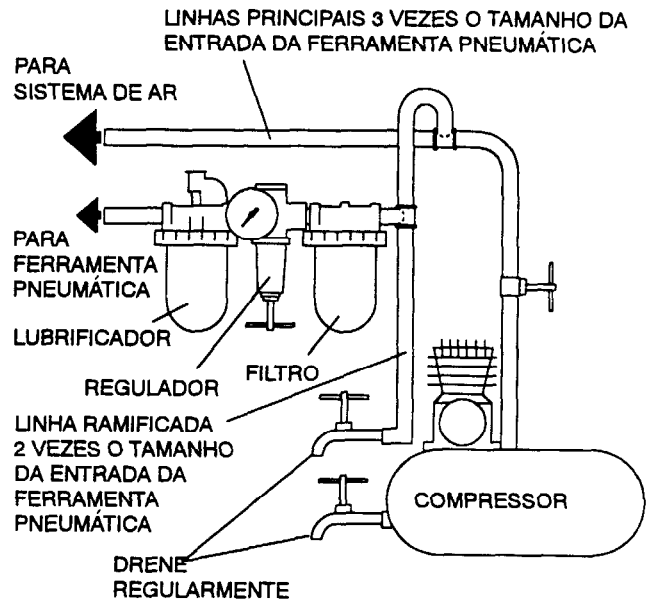
Depois de cada oito horas de operação, injecte cerca de 1/2 cc de Massa ARO Tool No 67 1LB ou ARO Tool No 77 1LB no Adaptador de Massa do Cabeçote em Ângulo. Lubrificação excessiva poderá fazer com que a graxa de espalhe em volta da Árvore de Montagem.

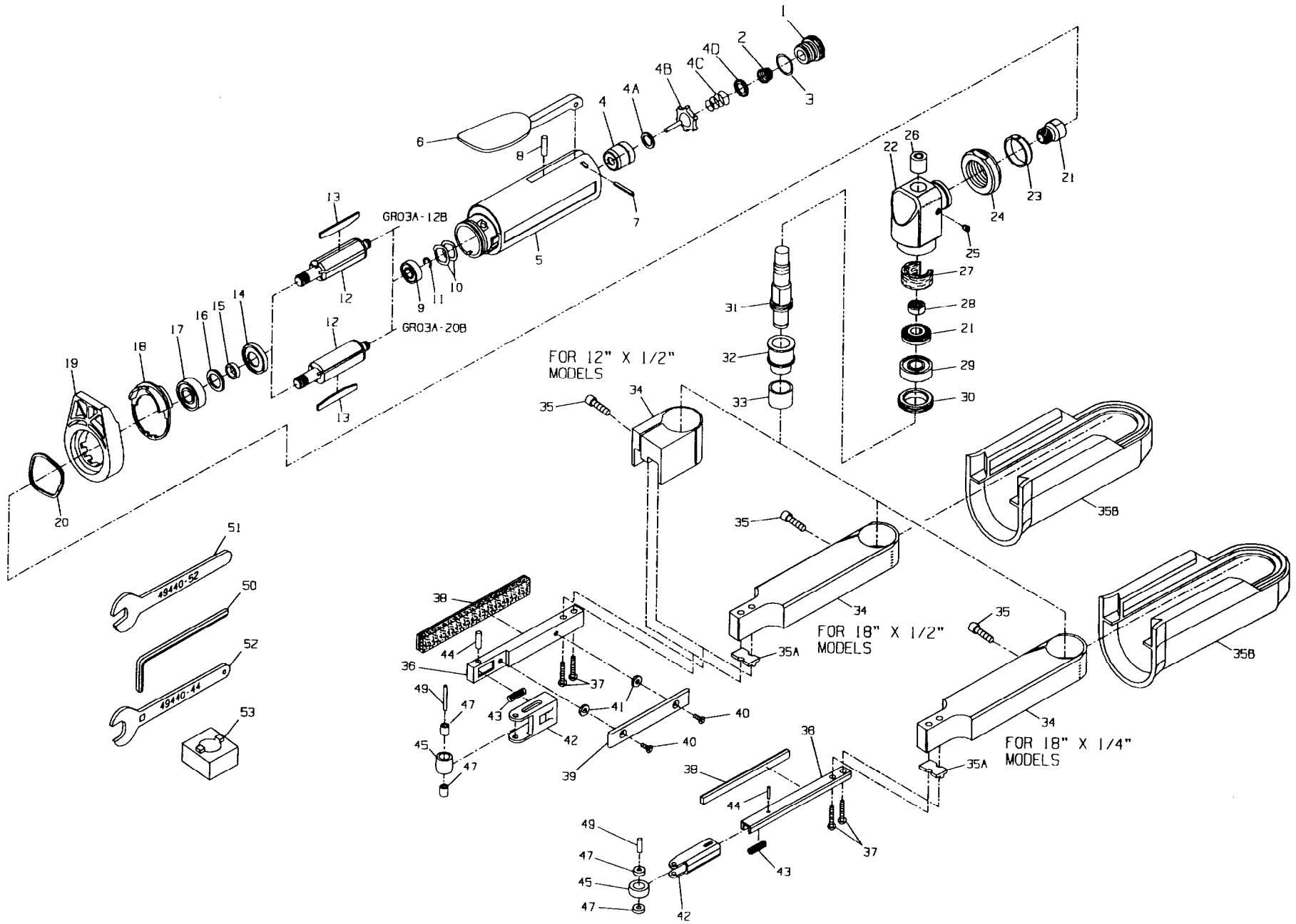
Quando quiser instalar uma nova linha de lubrificação, sature por inteiro a existente com cerca de 1-1/2 cc de Óleo IRAX No. 63Z4. Não substitua por qualquer outro óleo.

Quando quiser que o motor seja desmontado, remova a massa anterior e encha a cavidade atrás do Mancal do Rotor Traseiro com 3/4 cc de Massa IRAX No. 68 1LB.

CUIDADO

Não marque as superfícies não metálicas desta ferramenta com códigos de identificação do cliente. Tais acções podem afectar o desempenho da ferramenta.





PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Inlet Assembly	LG1-A465A		17	Front Rotor Bearing	LG1-24
2	Inlet Screen	R1602-61		18	Flow Ring	
• 3	Inlet Seal	85H-167			for GR03A-12 (brown)	LG1-103-1
	Throttle Valve Kit	LG1-K300			for GR03A-20 (red)	LG1-103-3
4	Throttle Valve Cartridge Case	LG1-300A		19	High Profile Flange	LG1-23
4A	Throttle Valve Seat	LG1-303	# ♦	19A	Low Profile Concentric Flange (for all models ending in C)	LG1R-23
4B	Throttle Valve	AG210-302		20	Flange Clamp	LG1-29
4C	Throttle Valve Spring	7L-51		21	Bevel Pinion and Bevel Gear (sold only as a matched set)	
4D	Throttle Valve Spring Seat	LG1-592			for GR03A-12	LA1-A552-2.0S
5	Motor Housing	ALG1-40			for GR03A-20	LA1-A552-1.5
6	Throttle Lever	ALG1-273		22	Angle Housing Assembly	LA1-A550S
▪ 6A	Locking Throttle Lever Assembly	LG1-A400		23	Clamp Spacer	LA1-46
*	Lever Lock	LG1-402		24	Clamp Nut	LG1-27
*	Lock Spring	LG1-405		25	Grease Fitting	D0F9-879
*	Lock Pin	5UT-757		26	Upper Arbor Bearing	AG210-693
7	Throttle Lever Pin	61H-120		27	Wick	
8	Throttle Valve Plunger	LG1-191	+		for GR03A-12	LA1-560
9	Rear Rotor Bearing	DG230-22			for GR03A-20	LA-561
• 10	Rear Rotor Bearing Spacer (2)	DG20-278		28	Bevel Gear Nut	AG210-578A
• 11	Rear Rotor Bearing Retainer	LG1-118		29	Lower Arbor Bearing	AG210-24
12	Rotor			30	Arbor Bearing Cap	AG210-531
	for GR03A-12 (5 vane slots) ...	LG1-53-5		31	Arbor	AG210-4-G4
	for GR03A-20 (3 vane slots) ...	LG1-53-3		*	Warning Label	
• 13	Vane Packet (set of 5 Vanes)	LG1-42-5			for models ending in -EU	EU-99
14	Front End Plate	LG1-11			for all other models	ALG1-99
15	Front End Plate Spacer	DG10-65-5				
• 16	Front Seal Cup	LG1-32				

* 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.

▪ Included with models that have a "-L" in the suffix.

♦ Included with models that have a "-C" in the suffix.

▲ WARNING

Always install a Locking Throttle Lever Assembly (6A) on a tool with a Low Profile Concentric Flange (19A). Installing a Concentric Flange on a tool without a Locking Throttle Lever will allow the tool to continue running if the tool is dropped or set down on the standard non-locking Throttle Lever (6).

+ The LA1-A550S Angle Housing Assembly is furnished with two Wicks. Use Wick (LA1-561) with the notch on GR03A models.

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

* Nameplate		39	Belt Plate (for 12" x 1/2" and 18" x 1/2" models only)	LG1-360
for GR03A-12 models ending in -EU	ALA112-EU-301			
for all other GR03A-12 models	ALA112-301	40	Belt Plate Retaining Screw (for 12" x 1/2" and 18" x 1/2" models only) (2)	105588
for GR03A-20 models ending in -EU	ALA120-EU-301			
for all other GR03A-20 models	ALA120-301	41	Belt Plate Spacer (for 12" x 1/2" and 18" x 1/2" models only) (2)	LG1-361A
Belt Sander Assembly		42	Yoke	
for 12" x 1/2" models	LG1-A350-812		for 12" x 1/2" and 18" x 1/2" models	LG1-354A
for 18" x 1/2" models	LG1-A350-818		for 18" x 1/4" models	LG1-354-18-1/4
for 18" x 1/4" models	LG1-A350-418			
32 Spindle Cap	LG1-362	43	Yoke Spring	LG1-355
33 Drive Sleeve	LG1-358	44	Yoke Retaining Pin	
34 Guard			for 12" x 1/2" and 18" x 1/2" models	D92-152
for 12" models	LG1-357		for 18" x 1/4" models	9DF5846-667
for 18" models	LG1-901			
35 Guard Clamp Screw	SRA010A1-68	45	Idler Wheel Assembly	
35A Alignment Block (for 18" models only)	LG1-902		for 12" x 1/2" and 18" x 1/2" models	LG1-A352A
35B Cover (for 18" models only)	LG1-900		for 18" x 1/4" models	LG1-A352-18-1/4
36 Clevis Assembly		47	Idler Wheel Bearing (2)	
for 12" x 1/2" and 18" x 1/2" models	LG1-A351A		for 12" x 1/2" and 18" x 1/2" models	7AH-500
for 18" x 1/4" models	LG1-A351-18-1/4		for 18" x 1/4" models	LG1-365
* Belt Speed Label	LA1-98	49	Idler Wheel Shaft	
37 Clevis Mounting Screw (2)			for 12" x 1/2" and 18" x 1/2" models	R31-121
for 12" x 1/2" and 18" x 1/4" models	LG1-634		for 18" x 1/4" models	LG1-366
for 18" x 1/2" models	LG1-903			
38 Belt Pad		50	Guard Clamp Screw	
for 12" x 1/2" and 18" x 1/2" models	LG1-363		Wrench (5/32" hex)	4U-478
for 18" x 1/4" models	LG1-364			

* Not illustrated.

PART NUMBER FOR ORDERING 

PART NUMBER FOR ORDERING 

*	Sanding Belt Pack (includes 10 belts)		51 52 53 * ⊗ * * ⊗ *	Collet Body Wrench(7/16") Clamp Nut Wrench Arbor Bearing Cap Wrench Variable Speed Control Assembly (with piped away exhaust) Piped Away Exhaust Kit	125C-69 LA1-253 AG210-29 LG1-A1015 LG1-K284
	for 12" x 1/2" models				
	60 Grit	LG1-SB812-60-10			
	80 Grit	LG1-SB812-80-10			
	100 Grit	LG1-SB812-100-10			
	for 18" x 1/2" models				
	60 Grit	LG1-SB818-60-10			
	80 Grit	LG1-SB818-80-10			
	100 Grit	LG1-SB818-100-10			
	for 18" x 1/4" models				
	60 Grit	LG1-SB418-60-10			
	80 Grit	LG1-SB418-80-10			
	100 Grit	LG1-SB418-100-10			

* Not illustrated.

⊗ Included with models that have a "-P" in the suffix.

NOTICE

By design, front exhaust models also exhaust some air out of the rear of the tool. Piped-away exhaust should be requested and containment of rear exhaust air is required.

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.

DISASSEMBLY

General Instructions

1. Do not disassemble the tool any further than necessary to replace or repair damaged parts.
2. When grasping a tool or part in a vise, always use the surface of the part or tool 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.
5. Do not press any needle bearing from a part unless you have a new needle bearing on hand for installation. Needle bearings are always damaged during the removal process.

Disassembly of the Sanding Arm

1. For 18" models, slide the Cover (35B) rearward toward the handle of the Sander until it is free. It may require a light rap on the front edge of the Cover to disengage it from its locking points.
2. Using the Guard Clamp Screw Wrench (50), loosen the Guard Clamp Screw (35) and remove the Guard (34) and assembled sanding arm from the Angle Housing (22).
3. Using a screwdriver, remove the two Clevis Mounting Screws (37) and separate the Clevis (36) from the Guard.
4. For 12" x 1/2" and 18" x 1/2" models, use a screwdriver, to remove the two Belt Plate Retaining Screws (40), two Belt Plate Spacers (41) and the Belt Plate (39).
5. If the Belt Pad (38) must be replaced, peel the Pad from the side of the Clevis or Yoke (42) and scrape the surfaces clean.
6. To separate the Yoke from the Clevis, press the Yoke Retaining Pin (44) out of the Yoke and Clevis with an arbor press.

WARNING

Be careful not to allow the compression of the Yoke Spring (43) to expel the Yoke or Clevis in an unsafe manner when the pressing plug is withdrawn from the Yoke.

7. Press the Idler Wheel Shaft (49) out of the Yoke and Idler Wheel (45).
8. The Idler Wheel contains an Idler Wheel Bearing (47) at each end. Simultaneously press both Bearings out of the Wheel.

Disassembly of the Angle Head

1. Grasp the tool in leather-covered or copper-covered vise jaws with the Spindle Cap (32) upward. Using the Collet Body Wrench (50) on the flats of the Arbor (31), unscrew the Spindle Cap. If the Drive Sleeve (33) needs replacement, cut the old one from the Spindle Cap.
2. Using the Arbor Bearing Cap Wrench (53), unscrew and remove the Arbor Bearing Cap (30). This is a left-hand thread. Rotate the Cap Wrench clockwise to remove the Cap.
3. Using the Clamp Nut Wrench (52), loosen the Clamp Nut (24) and pull the Angle Housing Assembly (22) away from the Motor Housing (5). This is a left-hand thread. Rotate the Nut Wrench clockwise to loosen the Nut.

NOTICE

Do not allow the Angle Head to rotate when separating it from the Motor. Components may fall from the Angle Head.

4. Grasp the Arbor and pull the assembled Arbor out of the Angle Head. If the Wick (27) needs replacement, pull it out of the Angle Housing.
5. If the Upper Arbor Bearing (26) needs replacement, place the Angle Head on the table of an arbor press, arbor end down, and press the Bearing out of the Angle Head.
6. Grasp the Arbor in leather-covered or copper-covered vise jaws with the collet end downward. Using an adjustable wrench, unscrew and remove the Bevel Gear Nut (28) and lift the Bevel Gear off the Arbor.
7. If the Lower Arbor Bearing (29) must be replaced, use a piece of tubing to support the Bearing on the table of an arbor press and press the Arbor from the Bearing.

Disassembly of the Motor

1. Pull the Flange (19) and Flow Ring (18) off the front of the Motor Housing (5).
2. Grasp the Bevel Pinion (21) and pull the assembled motor out of the Motor Housing. Remove the two Rear Rotor Bearing Spacers (10) from the bottom of the Housing.
3. Remove the Vanes (13) from the Rotor (12).
4. Grasp the Rotor in leather-covered or copper-covered vise jaws with the Bevel Pinion upward. Using a 1/2" wrench, unscrew and remove the Bevel Pinion (21).
5. If the Front Rotor Bearing (17) must be replaced, support the Front End Plate (14) between two blocks on the table of an arbor press. Place the blocks as close to the body of the Rotor as possible and press the Rotor from the Bearing and End Plate. Remove the Front End Plate Spacer (15) and Front Seal Assembly (16) from the hub of the Rotor.
6. If the Rear Rotor Bearing (9) must be replaced, use snap ring pliers to remove the Rear Rotor Bearing Retainer (11) and then remove the two Rear Rotor Bearing Spacers (10).
7. Using a bearing puller, pull the Rear Rotor Bearing off the hub of the Rotor.

Disassembly of the Inlet and Throttle

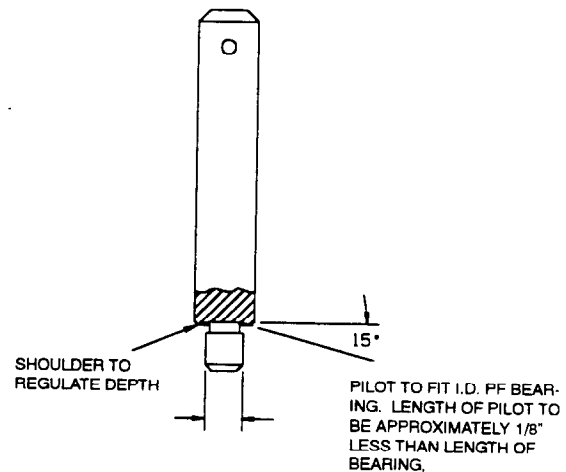
1. Using a 3/4" wrench, unscrew and remove the Inlet Assembly (1).
2. Remove the Inlet Seal (3) and Inlet Screen (2) from the Inlet.
3. Remove the Throttle Valve Spring Seat (4D), Throttle Valve Spring (4C) and Throttle Valve (4B) from the Motor Housing.
4. If the Throttle Valve Seat (4A) must be replaced, insert a hooked tool through the central opening of the Seat and, catching the underside of the Seat, pull it from the Housing.
5. If the Throttle Valve Cartridge Case (4) must be replaced, insert two hooked tools through the central opening of the Case approximately 180 degrees apart and, catching the underside of the Case, pull it from the Housing.
6. Press the Throttle Lever Pin (7) from the Housing and remove the Throttle Lever (6). Remove the Throttle Valve Plunger (8).

ASSEMBLY

General Instructions

1. Always press on the **inner ring** of a ball-type bearing when installing the bearing on a shaft.
2. Always press on the **outer ring** of a ball-type bearing when pressing the bearing into a bearing recess.
3. Whenever grasping a tool or part in a vise, always use leather-covered or copper-covered vise jaws. Take extra care not to damage threads or distort housings.
4. Always clean every part and wipe every part with a thin film of the recommended oil before installation.
5. Check every bearing for roughness. If an open bearing must be cleaned, wash it thoroughly in a clean, suitable cleaning solution and dry with a clean cloth. **Sealed or shielded bearings should not be cleaned.** Work grease into every open bearing before installation.
6. Apply a film of o-ring lubricant to every O-ring before installation.
7. Unless otherwise noted, always press on the stamped end of a needle bearing when installing a needle bearing into a recess. Use a bearing inserting tool similar to the one shown in Dwg. TPD786.

NEEDLE BEARING INSERTING TOOL



(Dwg. TPD786)

Assembly of the Throttle and Inlet

1. Insert the Throttle Valve Plunger (8) into the Motor Housing (5).
2. Position the Throttle Lever (6) on the Motor Housing and using an arbor press, press the Throttle Lever Pin (7) into the Housing and Lever. The Lever will retain the Plunger in the Housing.

MAINTENANCE SECTION

3. If the Throttle Valve Cartridge Case (4) was removed, lubricate the outside and the throttle stem end of the Case with o-ring lubricant. Using a wooden dowel, push the Case, open end trailing, into the Motor Housing.
4. If the Throttle Valve Seat (4A) was removed, use a wooden dowel with a flat end to push the Seat into the Case.
5. Push the small end of the Throttle Valve Spring (4C) onto the end of the Throttle Valve (4B) with the short stem until the Spring snaps into position around the hub and remains there. Install the dish end of the Throttle Valve Spring Seat (4D) onto the large end of the Throttle Valve Spring.
6. Holding the Housing with the Lever downward, make sure the Plunger is out of the way and insert the assembled Valve, long stem end leading, into the Cartridge Case.
7. Push the Inlet Screen (2), closed end leading, into the Inlet Assembly (1). After moistening the Inlet Seal (3) with o-ring lubricant and being careful not to nick the Seal on the threads of the Inlet, install the Seal on the Inlet.
8. Thread the Inlet Assembly into the Housing and tighten it between 13 to 15 ft-lb (17.6 to 20.3 Nm) torque.

Assembly of the Motor

1. If the Rear Rotor Bearing (9) was removed, stand the Rotor (12) upright on the table of an arbor press with the threaded end downward. Place the threaded rotor hub into a hole of a drilled block so that the Rotor rests against the large rotor body. Press the Rear Rotor Bearing onto the hub of the Rotor.

NOTICE

Press the Rotor Bearing onto the shaft with the shielded side of the Bearing against the rear end plate.

2. Install the Rear Rotor Bearing Retainer (11) in the groove on the hub of the Rotor.
3. Place the Front End Plate Spacer (15) onto the threaded hub of the Rotor and install the Front End Plate (14) around the Spacer, counterbored end trailing. Press the Front Seal Assembly (16), felt end trailing, onto the Spacer until the trailing end is flush with the Spacer. Lubricate the felt with IRAX No. 50P Oil.
4. Stand the Rotor on the table of an arbor press with the threaded end upward and press the Front Rotor Bearing (17) onto the hub of the Rotor.

NOTICE

The Front Rotor Bearing is a double flush ground bearing and must be installed in a specific manner. The end of the Bearing with a black stain or hash marks must be away from the Spacer.

5. Grasp the assembled Rotor in leather-covered or copper-covered vise jaws with the threaded rotor hub upward.
6. Thread the Bevel Pinion (21) onto the Rotor and using a torque wrench, tighten the Bevel Pinion between 9 and 10 ft-lb (12.2 and 13.6 Nm) torque.
7. Inject approximately 0.7 cc of IRAX No. 68-1LB Grease into the small recess at the bottom of the motor housing bore. Drop the two Rear Rotor Bearing Spacers (10) into the bottom of the motor housing bore.
8. Wipe each Vane (13) with a light film of oil and insert a Vane into each vane slot in the Rotor.
9. Grasp the Bevel Pinion and insert the assembled Rotor into the Motor Housing (5).
10. Assemble the Flow Ring (18) with the Flange (19) before installing the Flange on the Housing. Mate the Flow Ring to the end of the Flange without perforations. Align the notched projection on the edge of the Flow Ring with the letter "R" on the Housing. If the tool is to be used with front exhaust, purchase a Front Exhaust Flange (Part No. 49440-113) and align the notched projection on the edge of the Flow Ring with the letter "F" on the Housing.
11. Install the assembled Flange, Flow Ring leading, onto the front of the Motor Housing.

Assembly of the Angle Head

1. If the Upper Arbor Bearing (26) was removed and a new Bearing must be installed, proceed as follows:
 - a. Support the machined face of the Angle Head (22) on the table of an arbor press with the upper arbor bearing bore upward.
 - b. Press a new Upper Arbor Bearing into the bore, flush with the top of the Angle Housing.

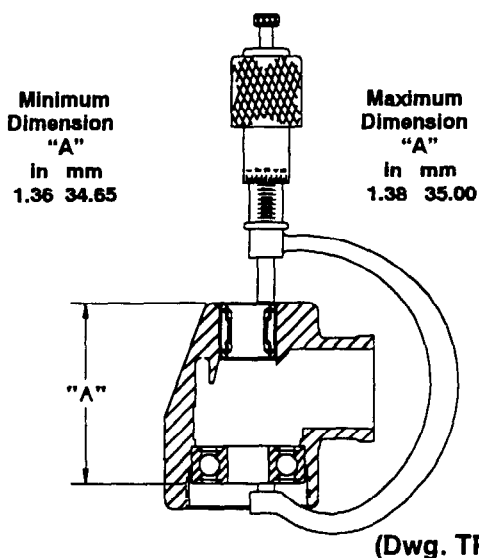
NOTICE

Always press on the stamped or closed end of the Bearing.

2. If the Lower Arbor Bearing (29) is being installed, it is necessary to note the identification marks on the Lower Arbor Bearing. The side of the Bearing having black stains or black hash marks on the side of the inner and outer races is opposite the flush ground side.

MAINTENANCE SECTION

3. Using your hand, push the Lower Arbor Bearing, **flush ground side inward**, into the recess at the machined end of the Angle Head.
4. Using a 2" micrometer, take a measurement from the inner ring of the Lower Arbor Bearing to the stamped or closed end of the Upper Arbor Bearing. See Dwg. TPD687.



5. Additional pressing of the Upper Arbor Bearing may be required to finally attain the correct dimension as indicated in the table above.
6. Remove the Lower Arbor Bearing.

NOTICE

In the following step, make certain any shims included with the Lower Arbor Bearing are installed onto the Arbor between the Bevel Gear (21) and the Bearing.

7. Using a sleeve that contacts the inner ring of the Lower Arbor Bearing, press the Bearing, **flush ground side of the Bearing trailing** onto the Arbor (31).
8. Slide the Bevel Gear, geared face trailing, onto the small threaded end of the Arbor, aligning the integral keys of the gear with the slotted keyways in the Arbor.

NOTICE

The Bevel Gear and Bevel Pinion are specially matched sets. Replace these parts only as a matched set.

9. Thoroughly clean the small threads on the Arbor above the Bevel Gear and the threads in the Bevel Gear Nut (28).
10. Apply a thin coat of Loctite 271 W/T Primer* (M. I. Herson Grade 427) to the threads of the Bevel Gear Nut and the Nut threads on the Arbor. Thread the Bevel Gear Nut onto the Arbor to retain the Bevel Gear and tighten the Nut to 10 to 12 ft-lb (13.5 to 16.2 Nm) torque. Grease the Bevel Gear with 1.5 cc of IRAX No. 67 1LB Grease.
11. Form the Wick (27) into a horseshoe shape and insert it into the Angle Head. Push the Wick into the opening until it is compressed approximately 0.030" below the bevel gear bore. Soak the Wick with approximately 0.5 cc of IRAX No. 63Z4 Oil. **Do no substitute any other oil.**
12. Carefully grasp the assembled motor in leather-covered or copper-covered vise jaws with the Throttle Lever Upward.
13. Install the motor Clamp Nut (24), threaded end trailing, onto the motor end of the Angle Head. Spread the Clamp Spacer (23) and install it on the motor end of the Angle Head against the Clamp Nut.
14. Position the output end of the Angle Head upward in alignment with the Throttle Lever and thread the Clamp Nut onto the Motor Housing. Using the Clamp Nut Wrench (52), tighten the Nut to 20 to 25 ft-lb (27 to 34 Nm) torque. This is a **left-hand** thread, turn **counterclockwise** to tighten.
15. Insert the assembled Arbor into the Angle Head, bevel gear end first, making sure the teeth on the Bevel Gear and Pinion mesh. Rotate the Arbor manually to determine that they are rotating smoothly.
16. Thoroughly clean the internal threads of the Angle Head and the threads on the Arbor Bearing Cap (30).
17. Carefully apply a uniform coat of Vibra-Tite VC3 No. 205 ** to both sets of threads and allow the compound to cure for 10 to 20 minutes.
18. Using the Arbor Bearing Cap Wrench (53), install the Arbor Bearing Cap and tighten to 12 to 15 ft-lb (16.2 to 20.3 Nm) torque. The Bearing Cap has a **left-hand** thread: turn **counterclockwise** to install.
19. If the Drive Sleeve (33) is being replaced, slide a new Sleeve onto the Spindle Cap (32) until it is captured between the two outer lipped edges.
20. Using the Collet Body Wrench (50) to hold the Arbor, install the Spindle Cap onto the Arbor.

MAINTENANCE SECTION

Assembly of the Sanding Arm

NOTICE

In the following step, ball bearings used in models having 1/4" wide belts must have the bearing seal facing outward.

1. If the Idler Wheel Bearings (47) were removed, press one Bearing into the Idler Wheel (45) until it is flush with the edge of the Wheel. Invert the Wheel. Press the remaining Bearing into the Wheel until it is flush with the edge of the Wheel.

NOTICE

In the following step, one hole in the Yoke is slightly larger than the other one. Determining which hole is larger will enable you to use finger pressure to insert the Shaft through that side of the Yoke.

2. Position the assembled Idler Wheel between the two ears of the Yoke (42) and press the Idler Wheel Shaft through the Yoke and assembled Idler Wheel.
3. For 12" x 1/2" and 18" x 1/2" models, place the Yoke Spring (43) into the hole in the end of the Clevis (36) and position the assembled Yoke over the Spring at the end of the Clevis. Make certain the slots in the Yoke align with the pin hole in the Clevis. Compress the Spring with the Yoke and press the Yoke Retaining Pin (44) through the Clevis and Yoke.

For 18" x 1/4" models, place the Yoke Spring (43) inside the end of the Yoke opposite the Idler Wheel until it stops against the tab. Position the Clevis (36) to slide into the Yoke making certain the Spring enters the slot in the end of the Clevis. Make certain the slot in the Yoke aligns with the pin hole in the Clevis. Compress the Spring with the Yoke and press the Yoke Retaining Pin (44) through the Clevis and Yoke.

4. For 12" x 1/2" and 18" x 1/2" models, insert one of the Belt Plate Retaining Screws (40) through one of the holes in the Belt Plate (39). Install one of the Belt Plate Spacers (41) on the Screw and start the Screw into the Clevis at the guard end. Insert the remaining Screw into the hole in the Plate at the yoke end and install the remaining Spacer on that Screw between the Plate and Clevis. Tighten both Screws with a screwdriver.
5. If the Belt Pad (38) is being replaced, peel the protective tape off the Pad and place the adhesive side of the Pad against the side of the Clevis opposite the Belt Plate.
6. For 12" models, using a screwdriver, attach the Clevis to the Guard (34) with the two Clevis Mounting Screws (37).
For 18" models, position the Alignment Block (35A) between the Clevis and the Guard (34) and secure it in position by attaching the Clevis to the Guard with the two Clevis Mounting Screws (37).
7. Position the Guard (34) on the Angle Head (22) and secure it by tightening the Guard Clamp Screw (35) between 2 and 3/4 ft-lb (2.7 and 3.7 Nm) torque.
8. Install a new sanding belt over the Spindle Cap and around the Idler Wheel.
9. For 18" models, align the Cover (35B) with the Guard and slide it forward toward the Idler Wheel until it snaps into position and stays there.
10. Operate the Sander at low speed to determine if the new belt is tracking properly. If the belt fails to track properly, realign the Clevis by tightening or loosening one or both of the Clevis Mounting Screws.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE

Trouble	Probable Cause	Solution
Low power or low free speed	Insufficient air pressure	Check air line pressure at the Inlet of the tool. It must be 90 psig (6.2 bar/620 kPa).
	Clogged muffler elements	Disassemble the tool and agitate the bare Motor Housing and Flange in a clean, suitable cleaning solution. If the elements cannot be cleaned, replace the Motor Housing and/or the Flange.
	Plugged Inlet Screen	Clean the Inlet Screen in a clean, suitable, cleaning solution or replace the Screen.
	Worn or broken Vanes	Install a complete set of new Vanes.
	Loose Clamp Nut	Tighten the Nut to 20 to 25 ft-lb (27 to 34 Nm) torque.
	Worn or broken Motor Housing	Replace the Motor Housing.
	Internal air leakage in the Motor Housing indicated by high air consumption/low speed or air leaking out the front and rear exhaust simultaneously.	Replace the Motor Housing.
	Grit buildup under the Throttle Lever restricting full Throttle Valve Plunger movement.	Remove the Throttle Lever and clean the groove in the Motor Housing.
	Bent stem on Throttle Valve	Replace the Throttle Valve
	Front Seal Cup dragging against the shield of the Front Rotor Bearing	Reposition or replace the Front Seal Cup.
Scoring	Worn Front End Plate Spacer or Front End Plate	Install a new Front End Plate Spacer and Front End Plate.
	Worn Front Rotor Bearing	Install a new Front Rotor Bearing.
Sanding Belt not tracking properly	Worn Idler parts	Install a new Idler Wheel Assembly
	Misalignment	Adjust the Clevis Mounting Screws
	Sanding on push side of Clevis	Sand on pull side of the Clevis.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE		
Trouble	Probable Cause	Solution
Leaky Throttle Valve	Dirt accumulation on Throttle Valve or Valve Seat	Disassemble, inspect and clean parts.
	Worn Throttle Valve or Valve Seat	Replace the Throttle Valve and/or Throttle Valve Seat.
Exhausts at wrong location	Incorrect orientation of the Flow Ring	Reverse the face of the Flow Ring against the Motor Housing.
Front Rotor Bearing runs hot	Incorrect installation of the Front Seal Cup	Reposition the Front Seal Cup flush with the face of the Front End Plate Spacer.
	Front End Plate Spacer rubbing the bore of the Front End Plate	Replace the Front End Plate and Front End Plate Spacer combination.
	Incorrect Front Rotor Bearing installation orientation	If a black stain or black hashmarks are not visible on the face of the Bearing when it is assembled with the End Plate and Rotor, the Bearing is backwards. If possible, remove the Bearing and install it correctly or replace the Bearing.
Slow tool idle	Bent or leaky Throttle Valve	Replace the Throttle Valve.
Air leakage around Flow Ring	Damaged, mutilated or missing Flange Clamp	Replace the Flange Clamp.
	Damaged Flow Ring	Replace the Flow Ring
Rough operation/vibration	Improper lubrication or dirt build-up	Disassemble the tool and clean in a clean, suitable, cleaning solution. Assemble the tool and inject 3 cc of the recommended oil into the Inlet and run the Sander long enough to coat the internal parts with the oil.
	Worn or broken Rear Rotor Bearing or Front Rotor Bearing	Replace the worn or broken Bearings. Examine the Front End Plate, Front End Plate Spacer, Front Seal Cup and Rear Rotor Bearing Spacers and replace any damaged parts. If the rear end plate is damaged, replace the Rotor.
	Worn or broken Upper Arbor Bearing or Lower Arbor Bearing	Replace the worn or broken Bearing.
	Worn or broken Bevel Gear or Bevel Pinion	Examine the Bevel Gear and Bevel Pinion. If either is worn or damaged, replace both the Gear and Pinion because they are a matched set and must not be used separately.

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

SCHRIFTELIJKE VERKLARING VAN CONFORMITEIT

Wij Ingersoll-Rand, Co.
(naam leverancier)

Swan Lane, Hindley Green, Wigan WN2 4EZ
(adres)

verklaren, onder onze uitsluitende aansprakelijkheid, dat het produkt:

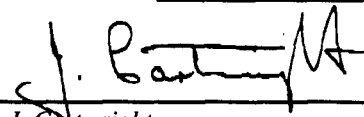
Type GR03A-EU Haakse Bandschuurmachines

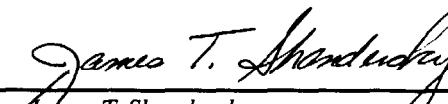
waarop deze verklaring betrekking heeft overeenkomt met de bepalingen van directieven:

89/392/EEG, 91/368/EEG, 93/44/EEG EN 93/68/EEG

overeenkomstig de volgende hoofdstandaards: ISO8662

Serienummers: (1996 →) XUA XXXXX →


J. Cartwright
Naam en handtekening van gemachtigde personen


James T. Shandersky
Naam en handtekening van gemachtigde personen

Juni, 1996
Datum

Juni, 1996
Datum

LET WEL

DEZE INSTRUCTIES GOED BEWAREN. NIET VERNIETIGEN.

Wanneer de levensduur van het gereedschap verstreken is, wordt u aangeraden het gereedschap te demonteren en ontvetten, en de delen gescheiden naar materialen op te bergen zodat zij gerecycled kunnen worden.

**Service Centers
Centres d'entretien
Niederlassungen
Centri di Assistenza
Centros de Servicio
Service Centra**

Ingersoll-Rand Company
510 Hester Drive
White House
TN 37188
USA
Tel: 1 800 TOOL HLP

Ingersoll-Rand
Sales Company Limited
Chorley New Road
Horwich Bolton
Lancashire BL6 6JN
England
UK
Tel: (44) 1204 690690
Fax: (44) 1204 690388

Ingersoll-Rand
Equipements de Production
111 avenue Roger Salengro
BP 59
F - 59450 Sin Le Noble
France
Tél: (33) 27 93 0808
Fax: (33) 27 93 0800

Ingersoll-Rand GmbH
Gewerbeallee 17
45478 Mülheim/Ruhr
Deutschland
Tel: (49) 208 99940
Fax: (49) 208 9994445

Ingersoll-Rand Italiana SpA
Casella Postale 1232
20100 Milano
Italia
Tel: (39) 2 950561
Fax: (39) 2 95360159

Ingersoll-Rand Ibérica
Camino de Rejas 1, 2-18
28820 Coslada (Madrid)
España
Tel: (34) 1 6695850
Fax: (34) 1 6696054

Ingersoll-Rand Nederland
Produktieweg 10
2382 PB Zoeterwoude
Nederland
Tel: (31) 71 452200
Fax: (31) 71 5218671

Ingersoll-Rand Company SA
PO Box 3720
Alrode 1451
South Africa
Tel: (27) 11 864 3930
Fax: (27) 11 864 3954

Ingersoll-Rand
Scandinavian Operations
Kastruplundgade 22, I
DK - 2770 Kastrup
Danmark
Tlf: (45) 32 526092
Fax: (45) 32 529092

Ingersoll-Rand SA
The Alpha Building
Route des Arsenaux 9
CH -1700 Fribourg
Schweiz/Suisse
Tel: (41) 37 205111
Fax: (41) 37 222932

Ingersoll-Rand Company
Kuznetsky Most 21/5
Entrance 3
103698 Moscow
Russia
CIS
Tel: (7) 501 882 0440
Fax: (7) 501 882 0441

Ingersoll-Rand Company
16 Pietro
Ul Stawki 2
00193 Warsaw
Poland
Tel: (48) 2 635 7245
Fax: (48) 2 635 7332

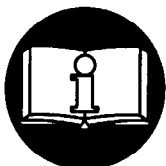
VINKELBÅNDSLIBERE, SERIE GR03A-EU

BEMÆRK

Vinkelbåndslibere af serie GR03A-EU er designet til anvendelse i metalforbearbejdningsindustrien og i støberier. Disse små vinkelbåndslibere er særdeles effektive til bortslibning af svejsesøm, slagger og skillefuger, så man får en god finish.

ARO påtager sig intet ansvar for eventuelle ændringer af værktøjer udført af brugeren i forbindelse med anvendelsesområder, som ARO ikke på forhånd er blevet konsulteret om.

⚠ ADVARSEL!



**INDEHOLDER VIGTIG SIKKERHEDSINFORMATION.
DENNE VEJLEDNING SKAL LÆSES FØR BETJENING AF VÆRKTØJET.
DET ER ARBEJDSGIVERENS ANSVAR AT SØRGE FOR, AT INDHOLDET
AF DENNE VEJLEDNING BRINGES TIL OPERATØRENS KUNDSKAB.**

MANGLENDE IAGTTAGELSE AF DISSE ADVARSLER KAN RESULTERE I PERSONSKADE.

IBRUGTAGNING AF VÆRKTØJET

- Dette værktøj skal altid betjenes, kontrolleres og vedligeholdes i overensstemmelse med de gældende lokale og nationale regler for manuelle trykluftværktøjer.
- Af sikkerhedshensyn og for at opnå den bedst mulige ydelse og levetid for værktøjskomponenterne, skal værktøjet bruges ved et maksimalt indgangslufttryk på 6,2 bar og med en lufttilførselsslange, der har en indvendig diameter på 8 mm.
- Der skal altid lukkes for lufttilførslen, og lufttilførselsslangen skal afmonteres før installation, afmontering eller justering af tilbehør til dette værktøj, eller før der udføres vedligeholdelsesarbejde på værktøjet.
- Der må ikke bruges beskadigede, flossede eller nedslidte luftslanger og tilbehør.
- Det skal sikres, at alle slanger og alt tilbehør er af den korrekte størrelse og er sikkert monteret. Se tegning TPD905-1, som viser en typisk rørføring.
- Der skal altid bruges ren, tør luft ved et maksimalt lufttryk på 6,2 bar. Støv, korroderende dampe og/eller for høj fugtighed kan ødelægge motoren i et trykluftværktøj.
- Værktøjer må ikke smøres med brændbare eller flygtige væsker så som petroleum, dieselolie eller flybrændstof.
- Mærkater må ikke fjernes. Eventuelt beskadigede mærkater skal udskiftes.

ANVENDELSE AF VÆRKTØJET

- Der skal altid bruges beskyttelsesbriller under betjening eller vedligeholdelse af dette værktøj.

- Der skal altid bruges høreværn under betjening af dette værktøj.
- Hænder, løstsiddende tøj og langt hår skal holdes borte fra den roterende ende af værktøjet.
- Under opstart og betjening af trykluftværktøjer, skal man forsøge at forudse og være særdeles opmærksom over for pludselige bevægelsesændringer.
- Der skal hele tiden holdes en kropsstilling med god balance og godt fodgreb. Som operatør skal man undgå at strække sig for langt under brug af dette værktøj. Der kan forekomme voldsomme reaktionsmomenter ved eller under det anbefalede lufttryk.
- Værktøjsindsatsen kan fortsætte med at rotere et kort stykke tid, efter man har sluppet håndtaget.
- Trykluftværktøjer kan vibrere under brug. Vibration, hyppigt gentagne bevægelser og ubekvemme stillinger kan være skadelige for operatørens hænder og arme. Brug af værktøjet bør ophøre, hvis man føler nogen form for gener, en snurrende fornemmelse i kroppen eller smerter. Der skal søges lægehjælp, før brug af værktøjet genoptages.
- Der må kun bruges tilbehør, som anbefales af ARO.
- Ved installation eller flytning af vinkelhovedet, skal tangentarmens placering justeres, så reaktionskræfterne ikke holder spjældet åbent.
- Dette værktøj er ikke designet til brug i eksplosive arbejdsmiljøer.
- Dette værktøj er ikke isoleret mod elektriske stød.

BEMÆRK

Brug af reservedele, som ikke er originale ARO produkter, kan resultere i sikkerhedsrisici, forringet værktøjsydelse samt ekstra vedligeholdelse, og kan gøre alle garantier ugyldige.

Reparationsarbejde må kun udføres af autoriseret og korrekt uddannet personale. Kontakt venligst det nærmeste autoriserede ARO servicecenter.

For bestilling af dele og indhentning af yderligere oplysninger bedes De venligst kontakte Deres lokale ARO-distributør.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY

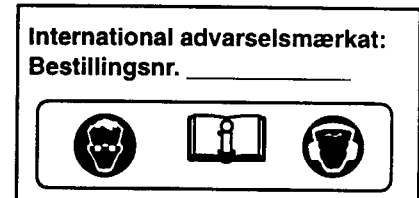
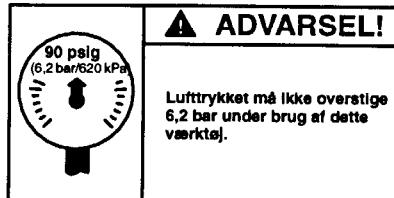
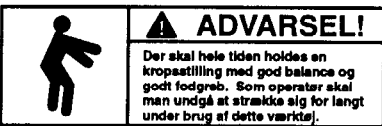
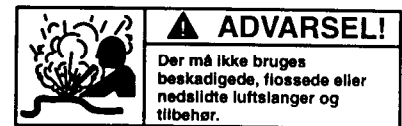
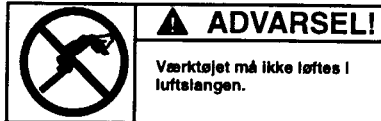
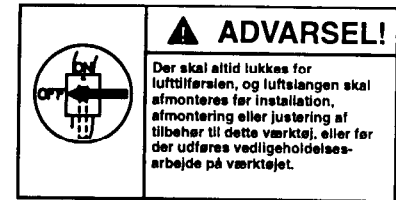
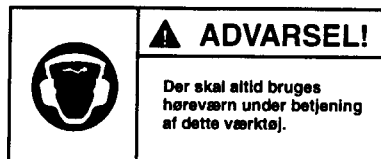
ARO

Part of worldwide Ingersoll-Rand

ADVARSELSMÆRKATER

⚠ ADVARSEL!

MANGLENDE IAGTTAGELSE AF DISSE ADVARSLER KAN RESULTERE I PERSONSKADE.



SÆRLIGE ADVARSLER FOR SLIBEMASKINER

⚠ ADVARSEL!

MANGLENDE IAGTTAGELSE AF DISSE ADVARSLER KAN RESULTERE I PERSONSKADE.

- Dette værktøj må ikke bruges, hvis den faktiske arbejdhastighed overskrider det på fabriksmærkatens angivne omdrejningstal.
- Før en slibemaskine udleveres til personale samt før montering af et slibebånd og efter reparationsarbejde, skal maskinens fri hastighed altid kontrolleres ved hjælp af en omdrejningstæller for at sikre, at værktøjets faktiske omdrejningstal ved et lufttryk på 6,2 bar ikke overstiger det på fabriksmærkatens stempede eller trykte omdrejningstal. Slibemaskiner, der er i varig brug under en arbejdsopgave, skal ligeledes kontrolleres på denne måde mindst én gang pr. skift.
- Den anbefalede beskyttelsesskærm fra ARO, der leveres sammen med slibemaskinen, skal altid benyttes.
- Vinkelbåndslibere af serie GR03A-12 har en fri hastighed på 12.000 omdrejninger i minuttet og en båndhastighed på 823 meter i minuttet, og vinkelbåndslibere af serie GR03A-20 har en fri hastighed på 20.000 omdrejninger i minuttet og en båndhastighed på 1.371 meter i minuttet ved et lufttryk på 6,2 bar. Hvis der bruges et højere lufttryk, vil arbejdhastigheden blive for høj.
- En båndsliber må ikke bruges med afmonteret dæksel.

JUSTERINGER

MONTERING AF SLIBEBÅND

Et nyt slibebånd monteres som beskrevet herunder:

1. På 18"-modeller skubbes dækslet bagud mod slibemaskinens håndtag, indtil det kan tages af. Det vil muligvis være nødvendigt at slå let på forkanten af dækslet, for at løsne det fra låsemekanismen.
2. Medløberhjulet trykkes ind, og det gamle bånd trækkes af drivmuffen. Trykket på medløberhjulet slækkes, og båndet tages af.
3. Det nye bånd anbringes på medløberhjulet.
4. Medløberhjulet trykkes ind med båndet påmonteret, og den anden ende af båndet sættes på drivmuffen og rundt om spindelhætten. Trykket på medløberhjulet slækkes.
5. På 18"-modeller anbringes dækslet ud for beskyttelsesskærmen og skubbes fremad mod medløberhjulet, indtil det går i hak med et klik og sidder fast.
6. Slibemaskinen køres ved lav hastighed for at konstatere, om båndets sporing er i orden. Hvis sporingen ikke er i orden, skal trækbøjlen justeres ved enten at stramme eller løsne en af eller begge monterings skrue.

IBRUGTAGNING AF VÆRKTØJET

BRUG AF VÆRKTØJET

Slibning kan foretages med en hvilken som helst del af det blotlagte stykke slibebånd. Det bedste resultat opnås ved at slibe med den del af slibebåndet, der trækkes af drivhjulet.

SMØRING



IRAX nr. 10P
IRAX nr. 50P
IRAX nr. 63Z4



IRAX nr. 67 1LB
IRAX nr. 68 1LB
IRAX nr. 77 1LB

Der skal altid bruges luftledningssmøring til disse værktøjer. Vi anbefaler følgende filter-, smøreanordnings- og reguleringsenhed:

Internationalt – IRAX nr. C26–C4–A29

Efter hver anden driftstunde, skal der sprøjtes mellem 0,5 og 1 kubikcentimeter olie af typen IRAX nr. 10P ind i lufttilslutningen, medmindre der bruges luftlednings-smøring.

Efter hver 8. driftstunde, skal der sprøjtes ca. 0,5 kubikcentimeter fedt af typen IRAX nr. 67 1LB eller IRAX nr. 77 1LB ind i vinkelhovedets smøreanordning.

Indsprøjtes der for meget fedt, vil noget af det arbejde sig ud omkring akslen.

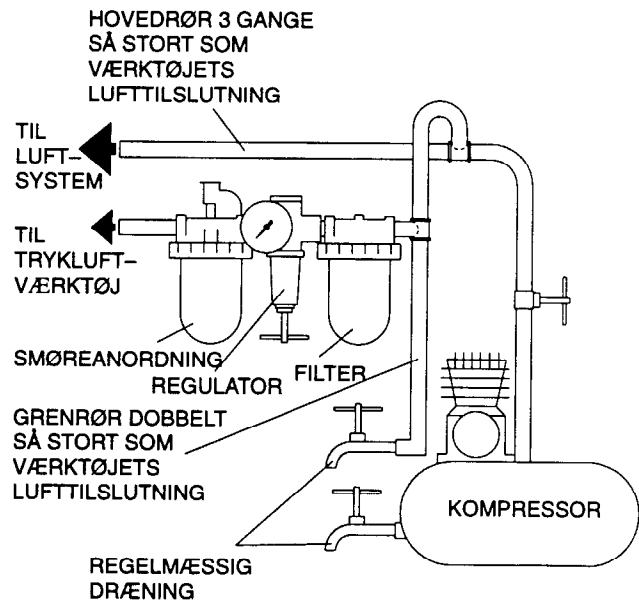
Når der sættes en ny væge i, skal den gennemvædes med ca. 1,5 kubikcentimeter olie af typen IRAX nr. 63Z4.

Ingen anden olietype må bruges.

Ved demontering af motoren, skal det gamle fedt fjernes og hulrummet bag det bageste rotorleje fyldes med 3/4 kubikcentimeter fedt af typen IRAX nr. 68 1LB.

FORSIGTIG

Der må ikke sættes kundeidentifikationsmærker på de af værktøjets overflader, der ikke er af metal. Dette kan forringe værktøjets levetid.



(Tegning TPD905–1)

SPECIFIKATIONER

Model	Båndstørrelse tommer (mm)	Akselhas- tighed o/min.	Båndhas- tighed bånd- meter/min.	Lydniveau dB (A)		♦ Vibrations- niveau m/s ²
				Tryk	Effekt	
GR03A–12RB–3–LP–EU	12 x 1/2 (305 x 13)	12.000	2.700	79,1	---	0,53
GR03A–20RB–3–LP–EU	12 x 1/2 (305 x 13)	20.000	4.500	81,4	---	0,60

- Afprøvet i overensstemmelse med ANSI S5.1–1971 ved fri hastighed
- ♦ Afprøvet i overensstemmelse med ISO8662–1 ved slibning på stålemne

FABRIKATIONSERKLÆRING

Vi _____ *Ingersoll-Rand, Co.*

(leverandørens navn)

_____ *Swan Lane, Hindley Green, Wigan WN2 4EZ*

(adresse)

erklærer som eneansvarlig, at nedenstående produkt,

_____ *Vinkelbåndslibere, serie GR03A-EU*

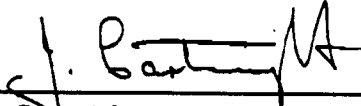
som denne erklæring vedrører, overholder bestemmelserne i følgende direktiver,

_____ *89/392/EØF, 91/368/EØF, 93/44/EØF OG 93/68/EØF*

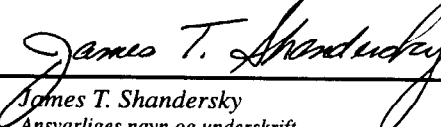
ved at være i overensstemmelse med følgende hovedstandard(er):

_____ *ISO8662*

Serienr. _____ *(1996 →) XUA XXXXX →*



J. Cartwright
Ansvarliges navn og underskrift



James T. Shandersky
Ansvarliges navn og underskrift

_____ *Juni, 1996*

Dato

_____ *Juni, 1996*

Dato

BEMÆRK

DENNE VEJLEDNING BØR GEMMES. MÅ IKKE DESTRUIERES.

Efter værktøjets levetid anbefales det at demontere og affede værktøjet, og opdele de adskilte komponenter ud fra materialetypen, så de kan genbruges.

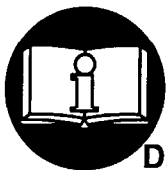


BANDSLIPMASKINER, SERIE GR03A-EU

OBS!

Bandslipmaskiner, serie GR03A-EU är avsedda för arbete inom metalltillverkningsindustrin och gjuterier. Dessa små bandputsmaskiner är mycket effektiva vid slipning av sveststrängar, slagg och delningslinjer samtidigt som de ger en fin yta.

ARO är inte ansvarigt för verktyg som har modifierats av kunden för att anpassas till andra användningar, om inte kunden har konsulterat ARO.



⚠ VARNING

**VIKTIG SÄKERHETSINFORMATION MEDFÖLJER.
LÄS DENNA HANDBOK INNAN VERKTYGET ANVÄNDS.**

DET ÅLIGGER ARBETSGIVAREN ATT SE TILL ATT DE ANSTÄLLDA SOM SKALL ANVÄNDA VERKTYGEN ÄR FÖRTROGNA MED HANDBOKENS INNEHÅLL. UNDERLÅTELSE ATT IAKTTAGA VARNINGARNA I DETTA INSTRUKTIONSHÄFTE KAN MEDFÖRA PERSONSKADOR.

INNAN VERKTYGET ANVÄNDS

- Användning, inspektion och underhåll av verktyget skall alltid ske i enlighet med på användningsplatsen rådande myndigheters gällande regler för handhållna pneumatiska verktyg.
- För säkerhet, bästa effektivitet och maximal varaktighet bör detta verktyg användas med ett maximalt lufttryck på 6,2 bar/620 kPa (90 pund/tum²) vid intaget och med en matarslang med en innerdiameter på 8 mm (5/16 tum).
- Stäng alltid av lufttillförseln och koppla bort matarslangen innan du monterar, avlägsnar eller justerar några tillbehör till detta verktyg och innan du utför service på verktyget.
- Använd aldrig skadade, slitna eller trasiga luftslangar och kopplingar.
- Se till att alla slangar och kopplingar är av rätt storlek och ordentligt fastsatta. Se bild TPD905-1 för en typisk installation.
- Använd alltid ren, torr luft och ett maximalt lufttryck på 6,2 bar (90 pund/tum²). Damm, frätande ångor och/eller för mycket fuktighet kan förstöra motorn på tryckluftswerktyg.
- Smörj aldrig verktygen med lättantändliga eller flyktiga vätskor, som t.ex. fotogen, diesel- eller flygbränsle.
- Avlägsna ej etiketterna. Byt ut skadade etiketter.

VERKTYGETS ANVÄNDNING

- Använd alltid skyddsglasögon när du använder eller utför service på detta verktyg.

- Använd alltid hörselskydd när du använder detta verktyg.
- Håll händer, lösa kläder och långt hår på avstånd från den roterande verktygsdelen.
- Förutse och var uppmärksam på plötsliga rörelseförändringar vid start och drift av alla motor-drivna verktyg.
- Stå stadigt, med god balans. Sträck dig inte för långt över verktyget när du arbetar. Höga reaktionsvridmoment kan inträffa vid det rekommenderade lufttrycket.
- Verktygstillbehör kan fortsätta att rotera en kort stund efter det att pådraget släpps.
- Tryckluftsdrivna verktyg kan vibrera under användningen. Vibrationer, monotona rörelser eller en obekväm ställning kan vara skadligt för händer och armar. Upphör att använda ett verktyg om det börjar sticka eller värka i händer och armar. Sök läkare innan du åter använder verktyget.
- Använd sådana tillbehör som rekommenderats av ARO.
- Alltid då vinkelhuvudet installeras eller justeras, måste pådragets spak hållas så att pådraget inte hålles kvar i tillslaget läge på grund av reaktionsvridmomentet.
- Detta verktyg är ej avsett att användas i explosiv atmosfär.
- Detta verktyg är ej isolerat mot elektrisk chock.

OBS!

Om andra reservdelar än de från ARO används, kan detta medföra en säkerhetsrisk, minskad verktygsprestanda och ett ökat servicebehov. Det kan dessutom få till följd att alla garantier blir ogiltiga.

Reparationer får endast utföras av auktoriserad, utbildad personal. Rådfråga närmaste auktoriserade ARO Tool Products servicecenter.

För information om reservdelar och service, ta kontakt med närmaste ARO-återförsäljare.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY

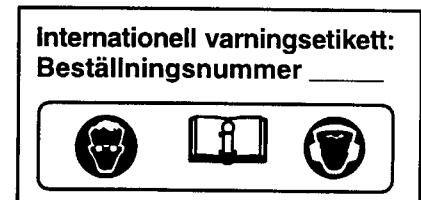
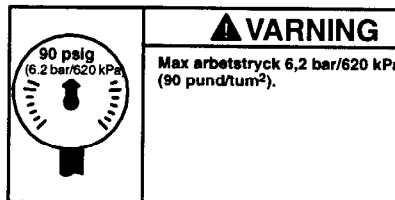
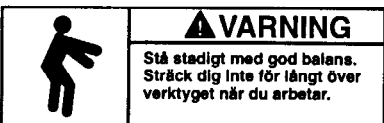
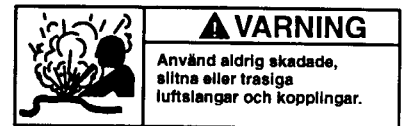
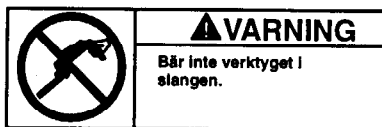
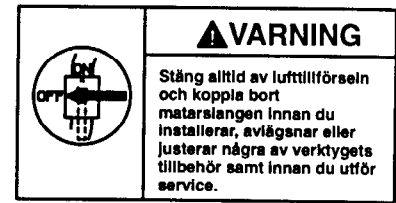
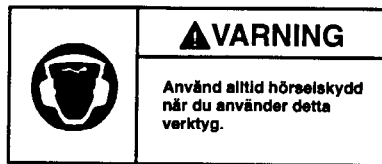
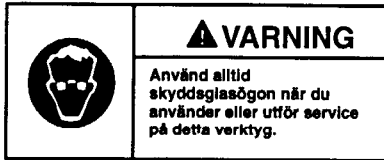
ARO

Ingår i globala Ingersoll-Rand

IDENTIFIERING AV VARNINGSETIKETTER

⚠ VARNING

UNDERLÅTELSE ATT IAKTTAGA FÖLJANDE VARNINGAR KAN MEDFÖRA PERSONSKADA.



SÄRSKILDA VARNINGAR FÖR SLIPMASKINEN

⚠ VARNING

UNDERLÅTELSE ATT IAKTTAGA FÖLJANDE VARNINGAR KAN MEDFÖRA PERSONSKADA.

- Använd ej detta verktyg om den verkliga fria hastigheten överstiger det varvtal som anges på namnplåten.
- Innan ett band monteras, efter alla typer av reparationer på verktyget och alltid då en putsmaskin lämnas ut för användning, skall verktygets fria varvtal mätas med en varvräknare för att tillförsäkra att dess verkliga hastighet vid 6,2 bar/620 kPa (90 pund per kvadrattum) inte överstiger det varvtal per minut som finns stämplat eller tryckt på namnplåten. Putsmaskiner på arbetsplatsen måste kontrolleras på liknande vis minst en gång under varje arbetsskift.
- Använd alltid rekommenderat ARO, vilket medföljde putsmaskinen.
- Bandslipmaskiner, serie GR03A-12 har ett fritt varvtal på 12 000 varv per minut och en bandhastighet på 2 700 fot per minut medan vinkelbandputsmaskiner, serie GR03A-20 har en fri hastighet på 20 000 varv per minut och en bandhastighet på 4 500 fot per minut, då de körs med ett lufttryck på 6,2 bar/620 kPa (90 pund per kvadrattum). Användning vid högre lufttryck kommer att leda till för hög hastighet.
- Försök inte att köra bandputsmaskinen med bortmonterat skydd.

JUSTERINGAR

— INSTALLATION AV ETT PUTSBAND —

Utför nedanstående moment för att installera ett nytt putsband:

1. **Beträffande 18 tum modeller**, skjut locket bakåt, mot putsmaskinens handtag tills det är löst. Det kan krävas att man knackar lätt på lockets framsida för att lossa det från dess låspunkter.
2. Tryck in stödhjulet och drag bort det gamla bandet från drivhjulet. Släpp trycket på stödhjulet och tag bort bandet.
3. Placera ett nytt band på stödhjulet.
4. Tryck in stödhjulet med bandets hjälp och för bandets motsatta ände på drevhjulet över spindeländan. Släpp trycket på stödhjulet.
5. **Beträffande 18 tums modeller**, rikta in locket med skyddet och för det framåt mot stödhjulet tills det knäpps på plats och sitter kvar i läge.
6. Kör putsmaskinen på låg hastighet för att kontrollera att det nya bandet går i rätt spår. Om så inte är fallet, skall gaffeln passas in igen, genom att den ena eller båda gaffelmonteringsbultarna lossas eller dras åt.

INNAN VERKTYGET ANVÄNDS

VERKTYGETS DRIFT

Försök använda hela slipbandet. För bästa resultat, slipa med den sida som löper mot det drivande hjulet.

SMÖRJNING



IRAX nr. 10P
IRAX nr. 50P
IRAX nr. 63Z4

IRAX nr. 67 1LB
IRAX nr. 68 1LB
IRAX nr. 77 1LB

Använd alltid tryckluftsmörjare med dessa verktyg. Vi rekommenderar följande enhet som filtersmörjarregulator:

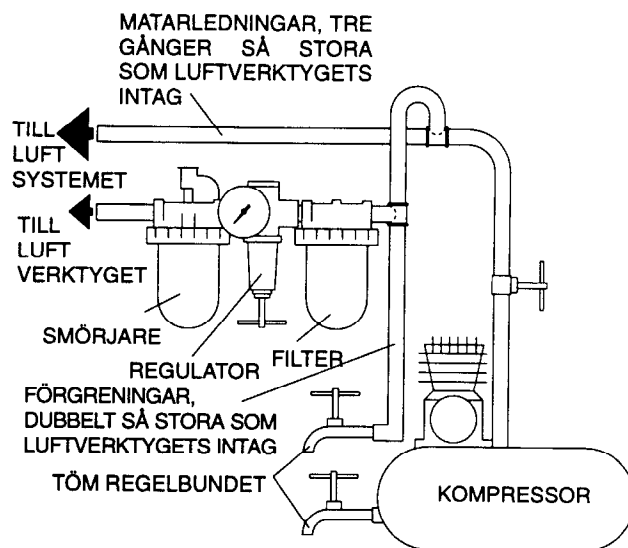
Internationellt – IRAX nr. C26–C4–A29

Efter varje två timmars drift, om inte en tryckluftsmörjare används, skall 1/2 till 1 cm³ av IRAXolja nr. 10P sprutas in i luftintaget.
Efter varje åtta timmars drift, skall cirka 1/2 cm³ IRAXsmörjmedel nr. 67 1LB eller nr. 77 1LB sprutas in i vinkelhuvudets fett nipple. För mycket smörjning kommer att leda till att fettarbetar sig ut runt axeln. Då en ny veke monteras skall den alltid grundligt genomdränkas med cirka 1–1/2 cm³ IRAXolja nr. 63Z4. Använd inte någon annan olja.

Alltid, då motorn demonteras, skall gammalt smörjmedel tömmas och fördjupningen bakom det bakre rotorlagret fyllas med 3/4 cm³ IRAXsmörjmedel nr. 68 1LB.

VARNING

Markera ej icke-metalliska ytor på detta verktyg med kundidentifikationskoder. Detta kan påverka verktygets funktion.



(Bild. TPD905–1)

SPECIFIKATIONER

Modell	Bandstorlek mm (tum)	Fritt varvtal varv/min	Band- hastighet Fot per min	■ Ljudstyrkenivå dB (A)		◆ Vibrations- nivå m/s ²
				Tryck	Kraft	
GR03A–12RB–3–LP–EU	305 x 13 (12 x 1/2)	12 000	2 700	79,1	---	0,53
GR03A–20RB–3–LP–EU	305 x 13 (12 x 1/2)	20 000	4 500	81,4	---	0,60

- Testad i enlighet med ANSI S5.1–1971 vid fri hastighet.
- ◆ Testad i enlighet med ISO8662–1 med sandning på arbetsstycke i stål

FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

Vi _____ *Ingersoll-Rand, Co.*
(leverantörens namn)

_____ *Swan Lane, Hindley Green, Wigan WN2 4EZ*

(adress)

intygar härmed, i enlighet med vårt fullständiga ansvar, att produkten,

_____ *Bandslipmaskiner, serie GR03A-EU*

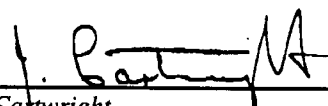
som detta intyg avser, uppfyller kraven i

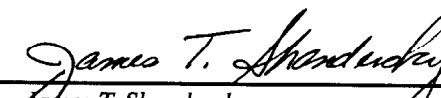
_____ *89/392/EEC, 91/368/EEC, 93/44/EEC OCH 93/68/EEC*

Direktiven.

Genom att använda följande principstandard: _____ *ISO8662*

Serienummer, mellan: _____ *(1996 →) XUA XXXXX →*

_____ 
J. Sawright
Auktoriserade personers namn och underskrift

_____ 
James T. Shandersky
Auktoriserade personers namn och underskrift

_____ *Juni, 1996*
Datum

_____ *Juni, 1996*
Datum

OBS!

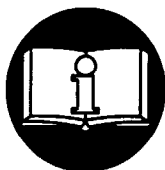
SPARA ANVISNINGARNA. FÅR EJ FÖRSTÖRAS.

Då verktyget är utslitet, rekommenderar vi att det tas isär och avfettas,
samt att de olika delarna sorteras för återvinning.

VINKEL BÅNDSLIPEMASKIN, SERIE GR03A-EU**MERK**

Vinkel båndslipemaskin, serie GR03A-EU er konstruert for arbeider i jern, metall- og støperiindustrien. Disse små slipemaskinene er meget effektive til å slipe sveisestrenger og skillelinjer og vil etterlate en fin overflate.

ARO er ikke ansvarlig for verktøymodifikasjoner som utføres av kunden uten at ARO er rådspurt.

**⚠ ADVARSEL**

**INNEHOLDER VIKTIG SIKKERHETSINFORMASJON.
LES DENNE INSTRUKSJONSHÅNDBOKEN FØR VERKTØYET TAS I BRUK.
DET ER ARBEIDSGIVERENS PLIKT Å GI INFORMASJONEN
I DENNE INSTRUKSJONSBOKEN TIL BRUKEREN.**

PERSONSKADER KAN OPPSTÅ HVIS IKKE FØLGENDE ADVARSLER BLIR FULGT.

FØRSTEGANGSBRUK AV VERKTØY

- Bruk, inspiser og vedlikehold alltid dette verktøyet i følge eksisterende lokale og nasjonale forskrifter for håndholdt/håndbetjent trykkluftverktøy.
- For å oppnå best sikkerhet, topp ytelse og maksimal levetid på deler, bør dette verktøyet brukes ved maksimalt lufttrykk på 6,2 bar/620 kPa (90 psig) målt ved luftinntaket når en 8 mm (5/16 tomme) innvendig diameter trykkslange brukes.
- Steng alltid av lufttilførselen og koble fra lufttilførselslangen før installering, fjerning eller justering av tilbehør, eller før vedlikehold blir utført på dette verktøyet.
- Bruk ikke en skadet, sprukket eller slitt luftslange/kobling.
- Sørg for at alle slanger og koblinger er av riktig størrelse og er tette. Se tegning TPD905-1 for et typisk koblingsarrangement.
- Bruk alltid ren, tørr luft ved maksimalt lufttrykk på 90 psig. Støv, etsende gasser og/eller for mye fuktighet kan ødelegge motoren på et trykkluftverktøy.
- Smør ikke verktøyene med brennbare eller ustabile væsker som parafin, diesel eller flybensin.
- Fjern ikke noen identifikasjonsmerker. Skift ut skadete merker.

BRUK AV VERKTØY

- Bruk alltid vernebriller under arbeid med eller vedlikehold av dette verktøyet.

- Bruk alltid hørselvern under arbeid med dette verktøyet.
- Hold hender, løse klær og langt hår unna rotasjonsdelen på verktøyet.
- Forutse og vær forberedt på plutselige bevegelsesforandringer ved oppstart og bruk av ethvert trykkluftverktøy.
- Hold kroppen i en balansert og stødig stilling. Len deg ikke for langt forover under bruken av dette verktøyet. Høye reaksjonsmomenter kan forekomme ved lavere lufttrykk enn det som er anbefalt.
- Verktøytilbehøret kan forsette å roté litt etter at hendelpådraget er sluppet.
- Trykkluftverktøy kan vibrere under bruk. Vibrasjon, gjentatte bevegelser eller ubekvemme stillinger kan være skadelig for hender og armer. Stans bruken av ethvert verktøy ved ubehag, stikkende følelser eller hvis du får smerter. Søk råd fra lege før videre arbeid gjenopptas.
- Bruk tilbehør som er anbefalt av ARO.
- Når et vinkelhode blir installert eller posisjonert, sørg for at hendelpådraget er plassert slik at reaksjonsmomentet ikke har tendens til å holde hendelpådraget i "PÅ" posisjon.
- Dette verktøyet er ikke beregnet til bruk på steder der det er fare for eksplosjon.
- Dette verktøyet er ikke isolert mot elektriske støt.

MERK

Bruk av andre deler enn originale ARO reservedeler kan føre til sikkerhetsrisiko, redusert verktøy-ytelse og økt vedlikehold, og kan føre til at garantien blir ugyldig.

Reparasjoner bør bare utføres av godkjent personell. Spør hos ditt nærmeste godkjente ARO Tool Products-verksted.

For opplysninger om deler og service vennligst kontakt din lokale ARO-distributør.

ARO Tool Products**Ingersoll-Rand Company**

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4E 0942-57131 •
FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY Trykt i U.S.A.

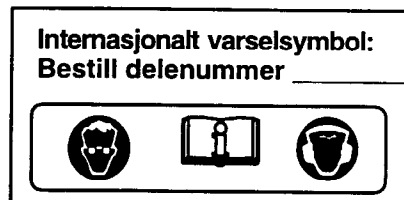
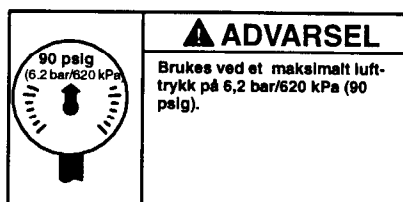
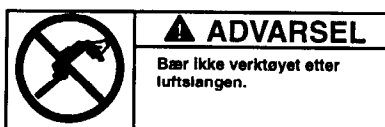
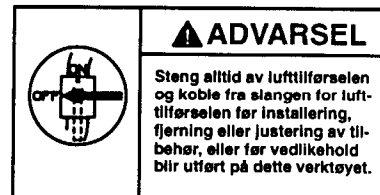
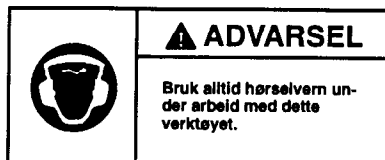
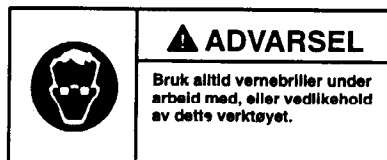
ARO

Del av verdensomspennende Ingersoll-Rand

VARSELSYMBOLER

⚠ ADVARSEL

ALVORLIGE PERSONSKADER KAN OPPSTÅ HVIS IKKE FØLGENDE ADVARSLER BLIR TATT TIL FØLGE.



SPESIELLE ADVARSLER FOR SLIPEMASKINER

⚠ ADVARSEL

HVIS IKKE DE FØLGENDE ADVARSLER BLIR TATT TIL FØLGE KAN DET RESULTERE I PERSONSKADER.

- Bruk ikke verktøyet hvis den frie hastigheten overstiger hastigheten (rpm) som er angitt på skiltet.
- Før et slipebånd blir satt på, etter en verktøyreparasjon eller når som helst en slipemaskin er utlevert til bruk, sjekk den frie hastigheten på slipemaskinen med en turteller for å være sikker på at den aktuelle rotasjonshastigheten ved 6,2 bar/620 kPa, (90 psig) ikke overstiger den rotasjonshastigheten som står stemplet eller trykket på navneplaten. Slipemaskiner som er i bruk på jobben må likeledes sjekkes minst en gang per skift.
- Bruk alltid det anbefalte ARO beskyttelsesdeksel som er levert med slipemaskinen.
- Serien GR03A-12 vinkel båndslipemaskiner har en fri hastighet på 12 000 rpm og en beltefastighet på 2 700 sfpm mens serien GR03A-20 vinkel belteslipemaskiner har en fri hastighet på 20 000 rpm og en beltefastighet på 4 500 sfpm ved 6,2 bar/620 kPa (90 psig) arbeidstrykk. Bruk ved høyere arbeidstrykk vil resultere i for høy hastighet.
- Bruk ikke slipemaskinen uten deksel.

JUSTERINGER

— INSTALLASJON AV NYTT BÅND —

Når et nytt bånd skal installeres, følg disse instruksjoner:

1. For 18-tomme modeller, skyv dekselet bakover mot håndtaket til det kan tas av. Det kan være nødvendig å slå lett på forkanten av dekselet for å løsne dekselet fra låsepunktene.
2. Trykk inn ledehjulet og fjern det gamle båndet fra drivhjulet. Slipp trykket på ledehjulet.
3. Sett det nye båndet på ledehjulet.
4. Trykk inn ledehjulet med båndet og skyv den andre enden inn på drivhjulet rundt spindelkapselen. Slipp trykket på ledehjulet.
5. For 18-tomme modeller, rett inn dekselet med beskyttelsesdekselet og skyv det forover mot ledehjulet til det smekker i posisjon og forblir der.
6. Bruk slipemaskinen ved lav hastighet for å sjekke om den sporer riktig. Hvis ikke, juster sjakkelen ved å stramme eller å løsne en eller begge sjakkemonteringskruene.

BRUK AV VERKTØY

BRUK

Slip ved å bruke hvilken som helst del av båndet. For det beste resultatet, bruk den delen av båndet som er trukket av drivhjulet.

SMØRING



IRAX nr. 10P
IRAX nr. 50P
IRAX nr. 63Z4

IRAX nr. 67 1LB
IRAX nr. 68 1LB
IRAX nr. 77 1LB

Bruk alltid et smøreapparat sammen med disse verktøyene. Vi anbefaler den følgende filter-smøre-regulator:

Internasjonalt: C26-C4-A29

Etter hver to timers bruk, unntatt når et smøreapparat blir brukt, fyll 1/2 til 1 cm³ med olje nr. 10P fra IRAX inn i luftinntaket.

Etter hver 8 timers bruk, injiser ca. 1/2 cm³ IRAX nr. 67 1LB eller IRAX nr. 77 1LB smørefett i smørenippelen på albuen.

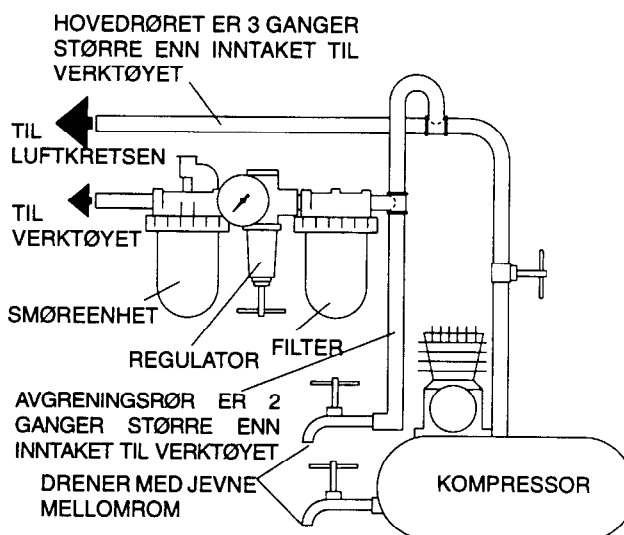
For mye fett vil resultere i at fettseter seg på akselen.

Når en ny veke er installert, sett veke i ca 1-1/2 cm³ med olje nr. 63Z4 fra IRAX. **Bruk ikke noen annen olje.**

Når motoren demonteres, fjern alt gammelt fett og fyll tomrommet bak det bakre rotorlageret med 3/4 cm³ med fett nr. 68 1LB fra IRAX.

OBS

Sett ikke kundeidentifikasjoner på noen del av dette verktøyet som ikke er metall. Hvis det gjøres kan dette virke inn på ytelsen på verktøyet.



(Tegning TPD905-1)

SPESIFIKASJONER

Modell	Båndstørrelse	Spindel-hastighet	Fri hastighet	■ Lydstyrkenivå dB (A)		◆ Vibrasjonsnivå m/s ²
				Trykk	Styrke	
GR03A-12RB-3-LP-EU	305 x 13 (12 x 1/2)	12 000 rpm	2 700 sfpm	79,1	---	0,53
GR03A-20RB-3-LP-EU	305 x 13 (12 x 1/2)	20 000 rpm	4 500 sfpm	81,4	---	0,60

- Testet i følge ANSI S5.1-1971 ved fri hastighet
- ◆ Testet i henhold til ISO8662-1 som gjelder pussing på stålemne

KONFORMITETSERKLÆRING

Vi Ingersoll-Rand, Co.
(leverandørens navn)

Swan Lane, Hindley Green, Wigan WN2 4EZ

(adresse)

erklærer som eneansvarlig at produktet,

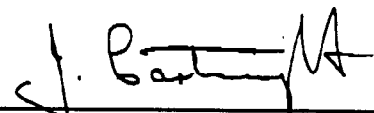
Vinkel båndslipemaskin, serie GR03A-EU

som denne erklæringen gjelder for, oppfyller bestemmelsene i EU-direktivene.

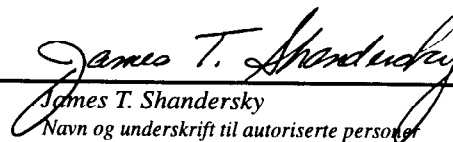
89/392/EEC, 91/368/EEC, 93/44/EEC OG 93/68/EEC

ved å bruke følgende prinsipielle standarder: ISO8662

Serienr.: (1996 →) XUA XXXXX →



J. Cartwright
Navn og underskrift til autoriserte personer



James T. Shandersky
Navn og underskrift til autoriserte personer

Juni, 1996

Dato

Juni, 1996

Dato

MERK

OPPBEVAR DISSE INSTRUKSJONENE. ØDELEGG DEM IKKE.

Når verktøyet ikke lenger er brukbart, anbefales det at verktøyet blir demontert, rengjort for olje og sortert etter materialer i gjenvinningsøyemed.

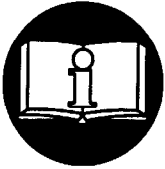
GR03A-EU –SARJAN NAUHAHIOMAKONEISIIN

HUOMAA

GR03A-EU –sarjan nauhahiomakoneet on suunniteltu käytettäväksi metallirakenteita valmistavassa teollisuudessa ja valimosovelluksissa. Nämä pienet nauhahiomakoneet ovat erittäin tehokkaita hitsisaumojen hiomisessa, hitsisaumojen kuonan poistossa ja liittymälinjojen tasoituksessa. Koneet tuottavat erittäin viimeistellyn pinnan.

ARO ei ole vastuussa työkalujen mahdollisista modifikaatioista muihin sovelluksiin, joista ARO ei ole tiedoitettu.

VAROITUS



**OHJEISSA ON MUKANA TÄRKEITÄ TURVAOHJEITA.
LUE TÄMÄ OHJEKIRJA ENNEN KUIN ALAT KÄYTTÄÄ TYÖKALUJA.
TYÖNANTAJAN VELVOLLISUUS ON SAATTAA TÄMÄ
OHJEKIRJA TYÖNTEKIJÖIDEN TIETOON.
SEURAAVIEN VAROITUSTEN LAIMINLYÖMINEN SAATTAA JOHTAA
VAMMAUTUMISEEN.**

TYÖKALUJEN KÄYTTÖÖNOTTO

- Käytä, tarkasta ja huolla tätä työkalua aina kaikkien käsikäyttöisiin ilmanpaineella toimiviin työkaluihin liittyvien säännösten mukaisesti (Työturvallisuuslaitoksen määräykset yms.)
- Käytä työkalua enintään 6,2 barin työpaineella ja liitä se 8 mm (5/16") paineilmaletkuun, jotta työkalu toimisi mahdollisimman tehokkaasti, turvallisesti ja pitkäikäisesti.
- Kytke paineilma aina pois päältä ja irroita paineilmaletku ennen kuin asennat, poistat tai säädät mitään tämän työkalun lisälaitetta tai ennen kuin alat huoltaa työkalua.
- Älä käytä vahingoittuneita, hankautuneita tai kulu-neita paineilmaletkuja tai -liittimiä.
- Varmistu, että kaikki paineilmaletkut ja -liittimet ovat oikeaa kokoa ja ne ovat tiiviisti kiinni. Katso kuvasta TPD905-1 kaaviota tavanomaisesta paineilmaletkennästä.
- Käytä aina puhdasta, kuivaa paineilmaa, jonka paine on enintään 6,2 bar. Pöly, ruostehöyryt ja/tai liika kosteus saattavat vahingoittaa työkalun paineilmamootoria.
- Älä voitele työkalua tulenaroilla tai helposti haihtuvilla nesteillä, kuten dieselöljyllä, kerosiinilla tai Jet-A-polttoaineella.
- Älä poista mitään työkalussa olevia tarroja. Vaihda vahingoittuneet tarrat.
- Käytä aina suojalaseja työkalua käyttäessäsi tai huoltaessasi.

TYÖKALUN KÄYTTÖ

- Käytä aina suojalaseja työkalua käyttäessäsi tai huoltaessasi.
- Käytä aina kuulosuojaimia työkalua käyttäessäsi.
- Pidä kädet, irtonainen vaatetus ja hiukset loitolla työkalun pyöriästä päästä.
- Ennakoi ja varo työkalun käynnistyksen ja käytön aikana työkalun liikkeiden ja voimien äkkinäisiä muutoksia.
- Seiso tukevassa asennossa hyvässä tasapainossa. Älä kurkota käyttäessäsi työkalua. Työkaluun saattaa yllättäen tulla voimakkaita vääntöliikkeitä sekä suositellulla ilmanpaineella että sitä pienemmällä paineella toimittaessa.
- Työkalun lisälaitteet voivat jatkaa pyöriä liikettä vielä jonkin aikaa kaasusta irti päästön jälkeenkin.
- Paineilmatyökalut voivat tärinästä toimiessaan. Tärinä, toistuvat liikesarjat tai epämiellyttävät asennot saattavat olla vahingollisia käsillesi ja käsi-varillesi. Lopeta työkalun käyttö, jos alat tuntea kihelmöintiä ja kipua. Käänny lääkärin puoleen ennen kuin jatkat työkalun käyttöä.
- Käytä ARO suosittomia lisälaitteita.
- Aina silloin kun kulmapää asennetaan tai sen asentoa muutetaan, käynnistysvipu täytyy olla niin asemoituna, että reaktiovoima ei pyri pitämään käynnistintä "PÄÄLLÄ" -asennossa.
- Tämä työkalu ei ole suunniteltu käytettäväksi räjähdysalttiissa ympäristöissä.
- Tämä työkalu ei ole eristetty sähköiskujen varalta.

HUOMAA

Muiden kuin ARO alkuperäisvaraosien käyttö saattaa johtaa vaaratilanteisiin, heikentyneisiin työkalun suoritusarvoihin, kasvavaan huollontarpeeseen ja se saattaa mitätöidä kaikki takuut.

Ainoastaan valtuutetun, koulutetun henkilöstön tulisi korjata työkalua. Lisätietoja saat lähimmästä ARO Toolin Productsmerkkihuoltokeskuksesta.

Varaosiin ja huoltoon liittyviin kysymyksiin vastaa paikallinen ARO-edustaja.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY

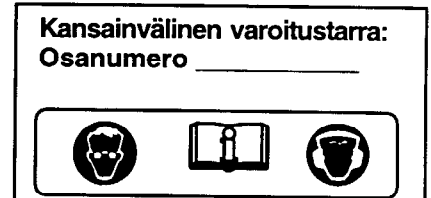
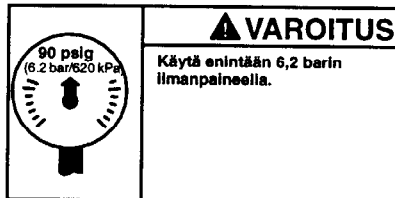
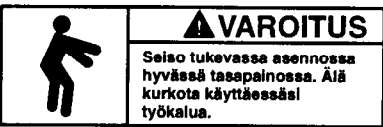
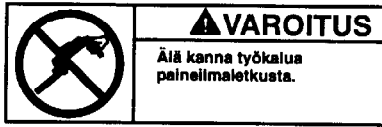
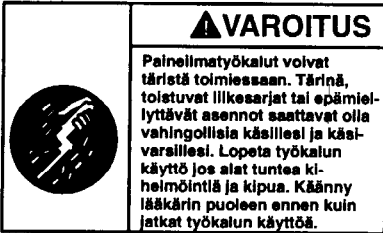
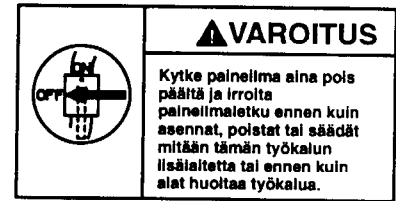
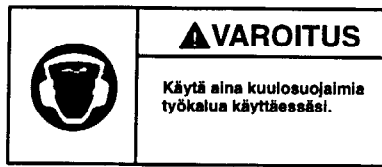
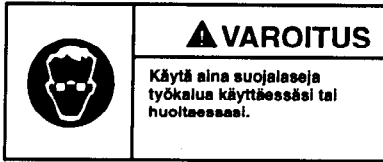
ARO

Osa maailmanlaajuisista Ingersoll-Rand -ryhmää

VAROITUSTARROJEN TULKINTAOHJEITA

VAROITUS

SEURAAVIEN VAROITUSTEN LAIMINLYÖMINEN SAATTAA JOHTAA VAMMAUTUMISEEN.



ERITYISESTI HIOMAKONEISIIN LIITTYVÄT VAROITUKSET

VAROITUS

SEURAAVIEN VAROITUSTEN LAIMINLYÖMINEN SAATTAA JOHTAA VAMMAUTUMISEEN.

- Älä käytä tätä hiomakonetta, jos toteat, että käytettäessä sen vapaa nopeus ylittää työkalun nimikilvessä mainitun arvon.
- Ennen kuin asennat hiomanauhan tai aina sen jälkeen kun työkalu on ollut korjauksessa tai aina kun työkalu ensimmäisen kerran otetaan käyttöön, tarkasta työkalun vapaa nopeus kierroslukumittarilla. Varmistu näin siitä, että työkalun vapaa nopeus käytössä 6,2 barin ilmanpaineella ei ylitä työkalun nimikilpeen merkittyä kierroslukua. Hiomakoneet, jotka ovat käytössä hiomatöissä täytyy tarkastaa samaa protokollaa noudattaen vähintään kerran kunkin työvuoron aikana.
- Käytä aina hiomakoneen mukana toimitettua ARO työstöpään suojaa.
- GR03A-12 -sarjan hiomanauhalla varustetut hiomakoneet toimivat 12 000 1/min vapaalla kierrosnopeudella ja niiden hiomanauhan nopeus on 2 700 neliöjalkaa minuuttia kohden. GR03A-20 -sarjan hiomanauhalla varustetut hiomakoneet toimivat 20 000 1/min vapaalla kierrosnopeudella ja niiden hiomanauhan nopeus on 4 500 neliöjalkaa minuuttia kohden. Nämä arvot pitävät paikkansa silloin, kun työkaluja käytetään 6,2 barin ilmanpaineella. Jos työkaluja käytetään suuremmalla ilmanpaineella, ne voivat käydä liian suurella kierrosnopeudella.
- Älä käytä nauhahiomakonetta silloin, kun sen kansi on poistettuna.

SÄÄDÖT

HIOMANAUHAN ASENTAMINEN

Kun asennat työkaluun uuden hiomanauhan, toimi seuraavien ohjeiden mukaisesti:

1. **18 tuuman mallit:** Liu'uta kantta taaksepäin kohden hiomakoneen kädensijaa niin pitkälle, että se on täysin vapaa. Voi olla mahdollista, että kansi tarvitsee napakan kopautuksen sen etureunaan, jotta se lähtee kokonaan irti lukituspisteistä.
2. Purista luistipyörää ja sujauta vanha nauha pois vetopyörän päältä. Lopeta luistipyörän puristaminen ja poista nauha.
3. Sovita uusi nauha luistipyörälle.
4. Purista luistipyörää nauhan avulla ja sujauta nauhan vastakkainen pää vetopyörän päälle akselin päädyn lähetyviltä. Lopeta luistipyörän puristaminen.
5. **18 tuuman mallit:** Asemoi kansi yhteen suojan kanssa ja liu'uta se eteenpäin kohti luistipyörää kunnes se napsahtaa paikalleen ja pysyy siinä.
6. Käytä hiomakonetta hetken aikaa alhaisella kierrosnopeudella jotta voisit päätellä, pysyykö uusi nauha hyvin kohdallaan. Jos uusi nauha ei pysy hyvin kohdallaan, asemoi ohjainta siten, että kiristä tai löysää yhtä tai useampia ohjaimen kiinnitysruuveja.

TYÖKALUN KÄYTTÖNOTTO

TYÖKALUN KÄYTTÖ

Hiominen voidaan suorittaa käyttämällä hyväksi mitä tahansa hiomanauhan osaa, joka on näkyvässä. Parhaan hiomatuloksen saavutat siten, että käytät nauhan sitä osaa, joka on lähinnä nauhaa vetävää vetopyörää.

VOITELU



IRAX 10P
IRAX 50P
IRAX 63Z4



IRAX 67 1LB
IRAX 68 1LB
IRAX 77 1LB

Käytä aina paineilma-voitelua työkalujen yhteydessä. Suosittelemme seuraavaa suodatin-voitelu-paineensäätö-yhdistelmälaitetta:

Kansainvälisessä käytössä – C26-C4-A29

Jos et käytä paineilma-voitelua, ruiskuta noin 0,5 cm³ – 1,0 cm³ IRAX 10P –öljyä paineilman tuloaukkoon **aina kahden käyttötunnin välein**.

Ruiskuta noin 0,5 cm³ IRAX 67 1LB rasvaa kulmapään rasvanippaan **aina kahdeksan käyttötunnin välein**.

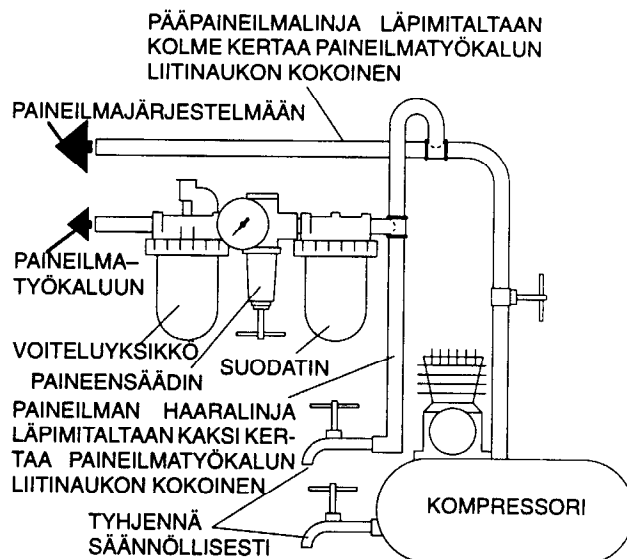
Ylenpalttinen voitelu aiheuttaa sen, että rasvaa alkaa levittyä työkalun akselin ympärille.

Aina silloin, kun työkaluun on asennettu voiteluhuopa, kostuta huopa perusteellisesti käyttämällä noin 1,5 cm³ IRAX 63Z4 –öljyä. **Älä korvaa tätä öljyä millään muulla voiteluaineella.**

Aina silloin, kun työkalun moottori on purettu, poista vanha rasva ja täytä taaimmaisen moottorin laakerin takana oleva kammio 0,75 cm³:lla IRAX 68 1LB –rasvaa.

VAARA

Älä tee mitään merkintöjä (kuten asiakastunnuksia ym.) tämä työkalun niihin pintoihin, jotka on valmistettu epämetallisista materiaaleista. Merkintöjen tekeminen näihin pintoihin saattaa vaikuttaa työkalun suoritusarvoihin.



(Kuva TPD905-1)

ERITTELY

Malli	Nauhan koko mm (tuumaa)	Akselin nopeus 1/min	Nauhan nopeus neliöjal- kaa/min	Melutaso dB (A)		♦ Värinä m/s ²
				Paine	Teho	
GR03A-12RB-3-LP-EU	305 x 13 (12 x 1/2)	12 000	2 700	79,1	---	0,53
GR03A-20RB-3-LP-EU	305 x 13 (12 x 1/2)	20 000	4 500	81,4	---	0,60

- Koestettu ANSI S5.1-1971 mukaisesti vapaalla kierrosnopeudella
- ♦ Koestettu ISO8662-1 mukaisesti hiomalla terästyökappaletta

VAKUUTUS NORMIEN TÄYTTÄMISESTÄ

Me Ingersoll-Rand, Co.
(toimittajan nimi)

Swan Lane, Hindley Green, Wigan WN2 4EZ
(osoite)

vakuutamme ja kannamme yksin täyden vastuun siitä, että tuote

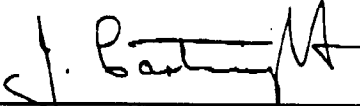
GR03A-EU -sarjan nauhahiomakoneet

johon tämä vakuutus viittaa, täyttää direktiiveissä

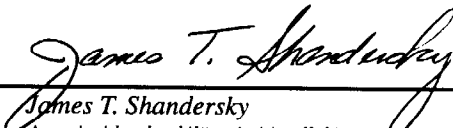
89/392/EEC, 91/368/EEC, 93/44/EEC JA 93/68/EEC

esitetty vaatimukset seuraavia perusnormeja käytettäessä: ISO8662

Sarjanumero: (1996 →) XUA XXXXX →



J. Cartwright
Autorisoidun henkilön nimi ja allekirjoitus



James T. Shandersky
Autorisoidun henkilön nimi ja allekirjoitus

Kesäkuu, 1996
Päiväys

Kesäkuu, 1996
Päiväys

HUOMAA

SÄÄSTÄ NÄMÄ OHJEET. ÄLÄ TUHOA NIITÄ.

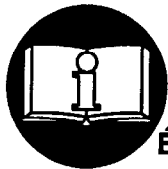
Kun tämän työkalun käyttöikä on loppunut, suosittelemme työkalun purkamista, puhdistusta rasvasta ja eri materiaalien erittelyä kierrätystä varten.

LIXADORES COM CORREIA EM ÂNGULO SÉRIES GR03A-EU

AVISO

Os Lixadores com Correia em Ângulo Séries GR03A-EU são concebidos para aplicações de trabalho em indústria e fundição de metais. Estes pequenos Lixadores são muito eficientes em esmerilar cordões de solda, e linhas de separação e madeira, deixando um fino acabamento.

A ARO Tool não é responsável por modificações, feitas pelo cliente em ferramentas, nas quais a ARO Tool não tenha sido consultada.



▲ ADVERTÊNCIA

**INFORMAÇÃO DE SEGURANÇA IMPORTANTE EM ANEXO.
LEIA ESTE MANUAL ANTES DE OPERAR A FERRAMENTA.
É DA RESPONSABILIDADE DO EMPREGADOR COLOCAR A INFORMAÇÃO
DESTE MANUAL NAS MÃOS DO OPERADOR.**

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

- Opere, inspecione e mantenha sempre esta ferramenta de acordo com todas regulamentações (local, estadual, federal e do país), que possam ser aplicadas às ferramentas pneumáticas operadas manualmente ou seguras com as mãos.
- Para segurança, máximo desempenho e máxima durabilidade das peças, opere esta ferramenta com uma pressão de ar máxima de 6,2 bar/620 kPa (90 psig) na entrada da mangueira de alimentação de ar com diâmetro interno de 8 mm (5/16").
- Desligue sempre a alimentação de ar e desconecte a mangueira de alimentação de ar antes de instalar, remover ou ajustar qualquer acessório nesta ferramenta, ou antes de executar qualquer serviço de manutenção nesta ferramenta.
- Não use mangueiras de ar ou adaptadores danificados, gastos ou deteriorados.
- Certifique-se de que todas as mangueiras e adaptadores sejam do tamanho correcto e estejam apertados com firmeza. Veja o Desenho TPD905-1 para um arranjo típico de tubagem.
- Use sempre ar seco e limpo com pressão máxima de 90 psig. Pó, fumos corrosivos e/ou humidade excessiva podem arruinar o motor de uma ferramenta pneumática.
- Não lubrifique as ferramentas com líquidos inflamáveis ou voláteis tais como querosene, diesel ou combustível de jactos.
- Não remova nenhum rótulo. Reponha qualquer rótulo danificado.

USANDO A FERRAMENTA

- Use sempre óculos de protecção quando estiver operando ou executando serviço de manutenção nesta ferramenta.
- Use sempre protecção contra ruído ao operar esta ferramenta.
- Mantenha as mãos, partes do vestuário soltas e cabelos compridos afastados da extremidade em rotação.
- Antecipe e esteja alerta a mudanças repentinas no movimento quando ligar e operar qualquer ferramenta motorizada.
- Mantenha a posição do corpo equilibrada e firme. Não exagere quando operar esta ferramenta. Torques de reacção elevados podem ocorrer na ou abaixo da pressão de ar recomendada.
- Os acessórios da ferramenta podem continuar a impactar brevemente após a pressão ter sido aliviada.
- Ferramentas accionadas pneumáticamente podem vibrar em uso. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser prejudiciais às mãos e aos braços. Pare de usar a ferramenta caso ocorra algum desconforto, sensação de formigamento ou dor. Procure assistência médica antes de retornar ao trabalho.
- Use acessórios recomendados pela ARO.
- Quando quer que o Cabeçote em Ângulo seja instalado ou reposto, a Válvula Reguladora de Pressão deve ser posicionada de modo que um torque de reacção não tenderá a reter o curso na posição "LIGADA".
- Esta Ferramenta não foi concebida para trabalhos em atmosferas explosivas.
- Esta Ferramenta não está isolada contra choques eléctricos.

AVISO

O uso de peças de substituição que não sejam genuinamente da ARO podem resultar em riscos de segurança, diminuição do desempenho da ferramenta, aumento da necessidade de manutenção e pode invalidar todas as garantias. As reparações devem ser feitas somente por pessoal treinado autorizado. Consulte o Centro de Serviços da ARO Tool Products mais próximo.

Para obter informações sobre peças e assistência, contacte o seu distribuidor local ARO.

ARO Tool Products

Ingersoll-Rand Company

SWAN LANE • HINDLEY GREEN • WIGAN, UK WN2 4EZ 0942-57131

• FAX 0942-55045 © 1996 INGERSOLL-RAND COMPANY

ARO

Parte da Ingersoll-Rand a nível mundial

IDENTIFICAÇÃO DO RÓTULO DE ADVERTÊNCIA

⚠ ADVERTÊNCIA

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

	⚠ ADVERTÊNCIA Use sempre óculos de proteção quando estiver operando ou executando algum serviço de manutenção nesta ferramenta.
	⚠ ADVERTÊNCIA Ferramentas accionadas pneumáticamente podem vibrar em uso. Vibração, movimentos repetitivos ou posições desconfortáveis podem ser prejudiciais às mãos e aos braços. Pare de usar a ferramenta caso ocorra algum desconforto, sensação de formigueiro ou dor. Procure assistência médica antes de retornar ao trabalho.
	⚠ ADVERTÊNCIA Mantenha a posição do corpo equilibrada e firme. Não exagere quando operar esta ferramenta. Torques de reação elevados podem ocorrer sob a pressão de ar recomendada.
	⚠ ADVERTÊNCIA Use sempre proteção contra o ruído ao operar esta ferramenta.
	⚠ ADVERTÊNCIA Não carregue a ferramenta segurando na mangueira.
	⚠ ADVERTÊNCIA Opere com pressão do ar Máxima de 90 psig (6,2 bar/620 kPa).
	⚠ ADVERTÊNCIA Desligue sempre a alimentação de ar e desconecte a mangueira de alimentação de ar antes de instalar, remover ou ajustar qualquer acessório nesta ferramenta, ou antes de executar algum serviço de manutenção nesta ferramenta.
	⚠ ADVERTÊNCIA Não use mangueiras de ar ou adaptadores danificados, gastos ou deteriorados.
Rótulo de Advertência Internacional No. de Referência para Pedido	
	

ADVERTÊNCIAS ESPECÍFICAS SOBRE O LIXADOR

⚠ ADVERTÊNCIA

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.

- Não use esta ferramenta se a velocidade livre total exceder a rpm indicada na placa de identificação.
- Antes de montar a correia de lixamento, depois de qualquer reparação de ferramenta ou quando se pretende que um Lixador seja colocado em funcionamento, verifique a velocidade livre do Lixador com um tacómetro para se certificar de que a sua velocidade real a 6,2 bar/620kPa (90 psig) não exceda a rpm selada ou impressa na placa de identificação. Os Lixadores em funcionamento devem ser similarmente verificados pelo menos uma vez em cada turno.
- Use sempre o Protector do Disco da ARO fornecido com o Lixador.
- Os Lixadores em Ângulo Séries GR03A-12 têm uma velocidade livre de 12 000 rpm e uma velocidade de correia de 2 700 sfpm enquanto os das Séries GR03A-20 têm velocidade livre de 20 000 rpm e uma velocidade da correia de 4500 sfpm, quando operados sob uma pressão de ar igual a 6,2 bar/620 kPa (90 psig). Operação sob pressões de ar mais elevadas resultará em velocidade excessiva.
- Não opere o lixador com correia com a capa removida.

AJUSTES

— INSTALANDO UMA CORREIA — DE LIXAMENTO

Quando uma correia de lixamento nova for instalada proceda da seguinte maneira:

1. Para modelos com 18", deslize a Capa para trás em direção ao punho do Lixador até libertá-la. Pode ser necessário uma leve pancada na extremidade frontal da capa para livrá-lo dos seus pontos de travamento.
2. Comprima o Disco Falso e retire a correia velha para fora da Camisa de comando. Alivie a pressão no Disco Falso e remova a correia.
3. Posicione a correia nova no Disco Falso.
4. Comprima o Disco Falso com a correia e coloque a extremidade oposta da correia na Camisa de Comando ao redor do Tampo do Fuso. Alivie a pressão no Disco Falso.
5. Para modelos com 18", alinhe a Capa com o Protector e deslize para frente em direção do Disco Falso até que ele prenda na posição e lá permaneça.
6. Opere o Lixador com velocidade baixa para verificar se a nova Correia está propriamente colocada. Se a Correia não correr no trilho de maneira apropriada, realinhe o Olhal ao apertar ou afrouxar um ou ambos Parafusos de Montagem do Olhal.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

— OPERAÇÃO DA FERRAMENTA —

Lixe usando qualquer porção da Correia de Lixamento exposta. Para resultados melhores, lixe naquela porção da Correia sendo puxada pelo Disco de Comando.

— LUBRIFICAÇÃO —



IRAX No. 10P
IRAX No. 50P
IRAX No. 63Z4



IRAX No. 67 1LB
IRAX No. 68 1LB
IRAX No. 77 1LB

Use sempre um lubrificador de ar de linha com estas ferramentas. Nós recomendamos a seguinte Unidade Filtro-Lubrificador-Regulador:

Para Internacional – IRAX No. C26-C4-A29

Depois de cada duas horas de operação, se um lubrificador de ar de linha não estiver sendo usado, injecte de 1/2 a 1 cc de Óleo IRAX No. 10P na Entrada de Ar.

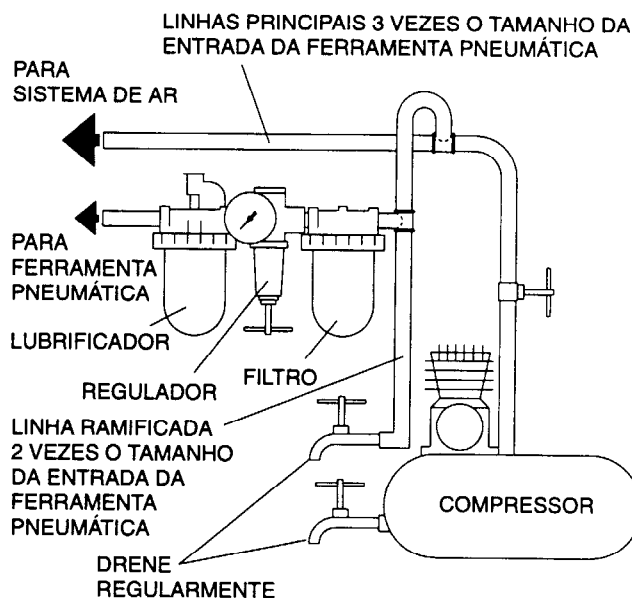
Depois de cada oito horas de operação, injecte cerca de 1/2 cc de Massa ARO Tool No 67 1LB ou ARO Tool No 77 1LB no Adaptador de Massa do Cabeçote em Ângulo. **Lubrificação excessiva poderá fazer com que a graxa de espalhe em volta da Árvore de Montagem.**

Quando quiser instalar uma nova linha de lubrificação, sature por inteiro a existente com cerca de 1-1/2 cc de Óleo IRAX No. 63Z4. **Não substitua por qualquer outro óleo.**

Quando quiser que o motor seja desmontado, remova a massa anterior e encha a cavidade atrás do Mancal do Rotor Traseiro com 3/4 cc de Massa IRAX No. 68 1LB.

CAUIDADO

Não marque as superfícies não metálicas desta ferramenta com códigos de identificação do cliente. Tais acções podem afectar o desempenho da ferramenta.



(Desenho TPD905-1)

ESPECIFICAÇÕES

Modelo	Tamanho da Correia	Velocidade da Árvore	Velocidade da Correia	Nível de Ruído dB (A)		Nível de Vibrações
	mm (pol.)	rpm	sfpm	Pressão	Potência	m/s ²
GR03A-12RB-3-LP-EU	305 x 13 (12 x 1/2)	12 000	2 700	79,1	---	0,53
GR03A-20RB-3-LP-EU	305 x 13 (12 x 1/2)	20 000	4 500	81,4	---	0,60

- Testada de acordo com a ANSI S5.1-1971 com velocidade livre
- ◆ Testada de acordo com a ISO8662-1 lixando uma peça de aço

**Servicentre
Servicecenter
Servicesenter
Huoltokeskus
Centros de Assistência Técnica**

Ingersoll-Rand Company
510 Hester Drive
White House
TN 37188
USA
Tel: 1 800 TOOL HLP

Ingersoll-Rand Nederland
Produktieweg 10
2382 PB Zoeterwoude
Nederland
Tel: (31) 71 452200
Fax: (31) 71 5218671

Ingersoll-Rand
Sales Company Limited
Chorley New Road
Horwich Bolton
Lancashire BL6 6JN
England
UK
Tel: (44) 1204 690690
Fax: (44) 1204 690388

Ingersoll-Rand Company SA
PO Box 3720
Alrode 1451
South Africa
Tel: (27) 11 864 3930
Fax: (27) 11 864 3954

Ingersoll-Rand
Scandinavian Operations
Kastruplundgade 22, I
DK - 2770 Kastrup
Danmark
Tlf: (45) 32 526092
Fax: (45) 32 529092

Ingersoll-Rand
Equipements de Production
111 avenue Roger Salengro
BP 59
F - 59450 Sin Le Noble
France
Tél: (33) 27 93 0808
Fax: (33) 27 93 0800

Ingersoll-Rand SA
The Alpha Building
Route des Arsenaux 9
CH -1700 Fribourg
Schweiz/Suisse
Tel: (41) 37 205111
Fax: (41) 37 222932

Ingersoll-Rand GmbH
Gewerbeallee 17
45478 Mülheim/Ruhr
Deutschland
Tel: (49) 208 99940
Fax: (49) 208 9994445

Ingersoll-Rand Company
Kuznetsky Most 21/5
Entrance 3
103698 Moscow
Russia
CIS
Tel: (7) 501 882 0440
Fax: (7) 501 882 0441

Ingersoll-Rand Italiana SpA
Casella Postale 1232
20100 Milano
Italia
Tel: (39) 2 950561
Fax: (39) 2 95360159

Ingersoll-Rand Company
16 Pietro
Ul Stawki 2
00193 Warsaw
Poland
Tel: (48) 2 635 7245
Fax: (48) 2 635 7332

Ingersoll-Rand Ibérica
Camino de Rejas 1, 2-18
28820 Coslada (Madrid)
España
Tel: (34) 1 6695850
Fax: (34) 1 6696054

