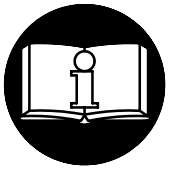
03529385
Form P6612
Edition 10
August, 2000

F
E
P

OPERATION AND MAINTENANCE MANUAL FOR MODELS, 7S30L, 7S48L AND 7S60L SANDERS AND MODEL 7P24L POLISHER

NOTICE

Models 7S30L, 7S48L and 7S60L Sanders and and 7P24L Polisher are designed for standard duty sanding and polishing operations in automobile repair shops and in sheet metal fabrication applications.
Ingersoll–Rand is not responsible for customer modification of tools for applications on which Ingersoll–Rand was not consulted.



⚠ WARNING

IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING TOOL.
IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE INFORMATION IN THIS MANUAL INTO THE HANDS OF THE OPERATOR.
FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

PLACING TOOL IN SERVICE

- **Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code for Potable 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 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.**
- **Check for excessive speed and vibration before operating.**
- **Tool shaft 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 Ingersoll–Rand.**
- **This tool is not designed for working in explosive atmospheres.**
- **This tool is not insulated against electric shock.**

NOTICE

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

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

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

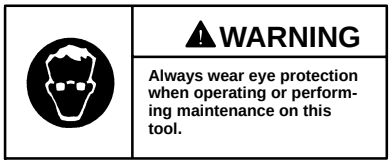
Printed in U.S.A.

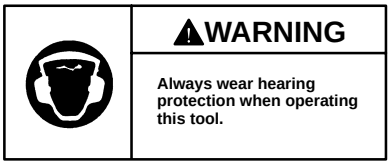
Ingersoll-Rand®

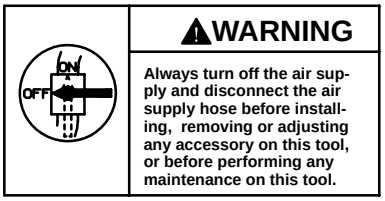
WARNING LABEL IDENTIFICATION

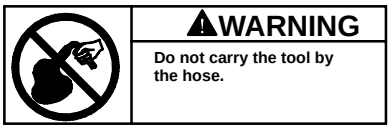
⚠ WARNING

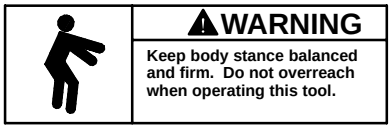
FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

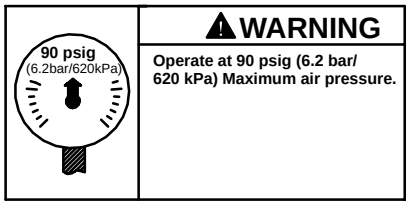












SANDER/POLISHER SPECIFIC WARNINGS

- **These Sanders/Polishers will operate at the free speed specified on the nameplate if the air supply line furnishes 90 psig (6.2 bar/620 kPa) air pressure at the tool. Operation at higher air pressure will result in excessive speed.**
- **Use only a sanding pad, buffing wheel or polishing bonnet with these tools. Do not use any grinding wheel, bur or metal removing accessory with these tools. Never use an accessory having a maximum operating speed less than the free speed of the Sander in which it is being used.**
- **When using a pad having a shank, insert the shank to full depth in the collet. When using a pad on a threaded arbor, make certain the flange nut is tightened securely. Check the tightness of the collet nut or flange nut before operating a Sander/Polisher to make certain it will not loosen during operation.**
- **Do not attempt to disassemble the Controller. The Controller is available only as a unit and is guaranteed for the life of the tool if it is not abused.**

PLACING TOOL IN SERVICE

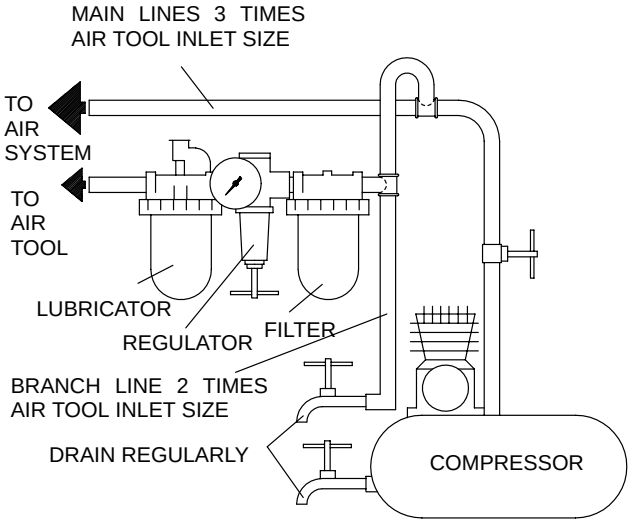
LUBRICATION

Ingersoll–Rand No. 10

Ingersoll–Rand No. 28

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

For USA – No. C18–03–FKG0–28



(Dwg. TPD905–1)

After each 50 000 cycles or each month, whichever occurs first, inject approximately 6 cc of Ingersoll–Rand No. 28 Grease into the Grease Fitting.

HOW TO ORDER A SANDER

VERTICAL SANDER WITH LEVER THROTTLE

Model	Free Speed, rpm	Spindle and Back Up Pad
7S30L	3 000	5/8–11, 7”
7S48L	4 800	5/8–11, 7”
7S60L	6 000	5/8–11, 7”

HOW TO ORDER A POLISHER

VERTICAL POLISHER WITH LEVER THROTTLE

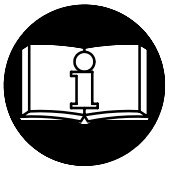
Model	Free Speed, rpm	Spindle and Polishing Pad
7P24L	2 400	5/8–11, 7”

F

MANUEL D'EXPLOITATION ET D'ENTRETIEN PONCEUSES MODÈLES 7S30L, 7S48L ET 7S60L ET DES POLISSEUSES MODÈLE 7P24L

NOTE

Les ponceuses Modèles 7S30L, 7S48L et 7S60L et les polisseuses Modèle 7P24L sont destinées aux opérations standard de ponçage et de polissage dans les ateliers de réparations automobiles et dans les applications de tôlerie.
Ingersoll–Rand ne peut être tenu responsable de la modification des outils par le client pour les adapter à des applications qui n'ont pas été approuvées par Ingersoll–Rand.



⚠ ATTENTION

**D'IMPORTANTES INFORMATIONS DE SÉCURITÉ SONT JOINTES.
LIRE CE MANUEL AVANT D'UTILISER L'OUTIL.**

L'EMPLOYEUR EST TENU DE COMMUNIQUER LES INFORMATIONS DE CE MANUEL AUX EMPLOYÉS UTILISANT CET OUTIL.

LE NON RESPECT DES AVERTISSEMENTS SUIVANTS PEUT CAUSER DES BLESSURES.

MISE EN SERVICE DE L'OUTIL

- **Toujours exploiter, inspecter et entretenir cet outil conformément au Code de sécurité des outils pneumatiques portatifs de l'American National Standards Institute (ANSI B186.1).**
- **Pour la sécurité, les performances optimales et la durabilité maximale des pièces, cet outil doit être connecté à une alimentation d'air comprimé de 6,2 bar (620 kPa) maximum à l'entrée, avec un flexible de 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. 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 volatiles tels que le kérosène, le gasoil ou le carburant d'aviation.**
- **Ne retirer aucune étiquette. Remplacer toute étiquette endommagée.**

UTILISATION DE L'OUTIL

- **Porter toujours des lunettes de protection pendant l'utilisation et l'entretien de cet outil.**
- **Porter toujours une protection acoustique pendant l'utilisation de cet outil.**
- **Tenir les mains, les vêtements flous 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.**
- **Vérifier que la vitesse et les vibrations ne sont pas excessives avant d'utiliser l'outil.**
- **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 Ingersoll-Rand.**
- **Cet outil n'est pas conçu pour fonctionner dans des atmosphères explosives.**
- **Cet outil n'est pas isolé contre les chocs électriques.**

NOTE

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

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

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

Imprimé aux É.U.

Ingersoll-Rand®

SIGNIFICATION DES ETIQUETTES 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

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

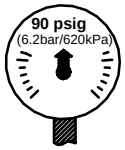
Garder une position équilibrée et ferme. Ne pas se pencher trop en avant pendant l'utilisation de cet outil.

⚠ ATTENTION

Porter toujours une protection acoustique pendant l'utilisation de cet 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

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

Ne pas utiliser des flexibles ou des raccords endommagés, effilochés ou détériorés.

AVERTISSEMENTS PARTICULIERS AUX PONCEUSES/POLISSEUSES

- **Ces ponceuses/polisseuses tourneront à la vitesse à vide spécifiée sur la plaque signalétique lorsque le circuit d'alimentation fournit de l'air à une pression de 6,2 bar (620 kPa) à l'outil. L'exploitation à une pression supérieure produira une vitesse excessive.**
- **Utiliser seulement un plateau de ponçage, un disque de polissage ou une peau de mouton de polissage avec ces outils. Ne jamais utiliser de meule ou d'accessoire d'ébavurage ou d'enlèvement de métal sur ces outils. Ne jamais utiliser d'accessoire ayant une vitesse de fonctionnement maximum inférieure à la vitesse à vide de la ponceuse sur laquelle il est utilisé.**
- **Lorsqu'un plateau de ponçage à tige est utilisé, insérer la tige à fond dans la pince. Lorsqu'un plateau est utilisé sur un arbre fileté, vérifier que l'écrou de bride est fermement serré. Vérifier le serrage de l'écrou de pince ou de l'écrou d'arbre avant de mettre la ponceuse/polisseuse en marche, et vérifier qu'il ne se desserre pas pendant l'exploitation.**
- **Ne jamais essayer de démonter le contrôleur. Ce dernier est fourni seulement comme un ensemble et est garanti pendant toute la durée de vie de l'outil s'il est utilisé correctement.**

MISE EN SERVICE DE L'OUTIL

LUBRIFICATION

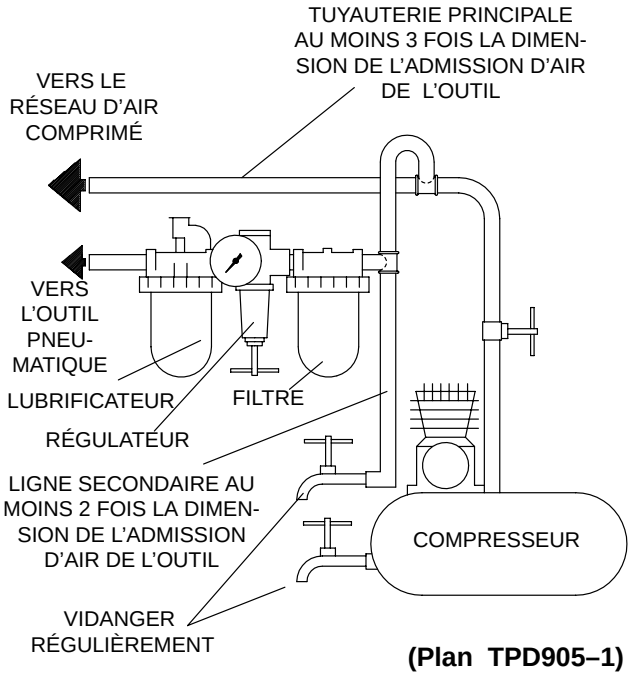
Ingersoll–Rand No. 10

Ingersoll–Rand No. 28

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

É.U. – No. C18–03–FKG0–28

Tous les 50 000 cycles ou tous les mois de fonctionnement, au minimum, injecter environ 6 cm^3 de graisse Ingersoll Rand No. 28 dans le raccord de graissage.



(Plan TPD905–1)

SPÉCIFICATIONS

Ponceuse	Commande	Vitesse libre	Broche et plateau d'appui
		tr/mn	
7S30L	Levier	3 000	5/8–11, 7"
7S48L	Levier	4 800	5/8–11, 7"
7S60L	Levier	6 000	5/8–11, 7"
Polisseuse	**Commande**	**Vitesse libre**	**Broche et plateau d'appui**
		tr/mn	
7P24L	Levier	2 400	5/8–11,7"

E

MANUAL DE FUNCIONAMIENTO Y MANTENIMIENTO PARA LAS LIJADORAS MODELOS 7S30L, 7S48L Y 7S60L Y PULIDORAS MODELO 7P24L

NOTA

Las lijadoras 7S30L, 7S48L y 7S60L, y pulidora 7P24L están diseñadas para tareas normales de lijado y pulido en talleres de reparación de automóviles y en la fabricación de chapa metálica. Ingersoll–Rand no aceptará responsabilidad alguna por la modificación de las herramientas efectuada por el cliente para las aplicaciones que no hayan sido consultadas con Ingersoll–Rand.

⚠ AVISO

SE ADJUNTA INFORMACIÓN IMPORTANTE DE SEGURIDAD.
LEA ESTE MANUAL ANTES DE UTILIZAR LA HERRAMIENTA.

ES RESPONSABILIDAD DE LA EMPRESA ASEGURARSE DE QUE EL OPERARIO ESTÉ AL TANTO DE LA INFORMACIÓN QUE CONTIENE ESTE MANUAL.
EL HACER CASO OMISO DE LOS AVISOS SIGUIENTES PODRÍA OCASIONAR LESIONES.

USO PREVISTO

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 en la entrada 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 ni deteriorados.**
- **Asegúrese de que todos los racores y mangueras sean del tamaño correcto y estén bien apretados. Vea el Esq. TPD905–1 para 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/o 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 pares de reacción elevados a la presión de aire recomendada, e incluso a presiones inferiores.**
- **Compruebe que no haya exceso de velocidad o vibración de la herramienta antes de utilizarla.**
- **El eje de la herramienta puede 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 al médico antes de volver a utilizarla.**
- **Utilice únicamente los accesorios recomendados por Ingersoll–Rand.**
- **Esta herramienta no ha sido diseñada para trabajar en ambientes explosivos.**
- **Esta herramienta no está aislada contra descargas eléctricas.**

NOTA

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

Las reparaciones sólo serán realizadas por personal cualificado y autorizado. Consulte con el centro de servicio autorizado Ingersoll–Rand más próximo.

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

Impreso en EE. UU.

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

Las herramientas neumáticas pueden vibrar durante el uso. La vibración, los movimientos repetitivos o las posiciones incómodas podrían dañarle los brazos y las manos. En caso de incomodidad, sensación de hormigueo o dolor, dejar de usar la herramienta. Consultar al médico antes de volver a utilizarla.

⚠ ADVERTENCIA

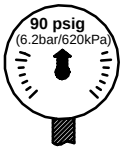
Mantener una postura del cuerpo equilibrada y firme. No estirar demasiado los brazos al manejar la herramienta.

⚠ ADVERTENCIA

Usar siempre protección para los oídos al manejar esta herramienta.

⚠ ADVERTENCIA

No coger la herramienta por la manguera para levantarla.



⚠ ADVERTENCIA

Manejar la herramienta a una presión de aire máxima de 90 psig (6,2 bar/620 kPa).

⚠ 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

No utilizar mangueras de aire y accesorios dañados, desgastados ni deteriorados.

AVISOS ESPECÍFICOS DE LIJADORA/PULIDORA

- **Estas lijadoras/pulidoras funcionan a la velocidad libre especificada en la placa de identificación siempre que la presión de aire que llega a la herramienta por la manguera de suministro de aire sea de 90 psig (6,2 bar/620 kPa). Si se utiliza la herramienta con el aire comprimido a una presión superior, se producirá un exceso de velocidad.**
- **Con estas herramientas sólo se deben utilizar discos de lijado o de pulir. No utilice muelas, fresas ni accesorios de desbarbado de metales con estas herramientas. No utilice nunca un accesorio que tenga una velocidad máxima inferior a la velocidad de la lijadora.**
- **Cuando use un disco de lijar que tiene vástago, inserte completamente el vástago en la pinza. Cuando use un disco en un mandril roscado, asegúrese de que la tuerca de brida esté apretada de manera segura. Compruebe el apriete de la tuerca de la pinza o tuerca de brida antes de usar la lijadora/pulidora para que no se afloje durante el uso.**
- **No intente desarmar el regulador. El regulador está disponible solamente como unidad y está garantizado por toda la vida útil de la herramienta, siempre que se utilice como es debido.**

PARA PONER LA HERRAMIENTA EN SERVICIO

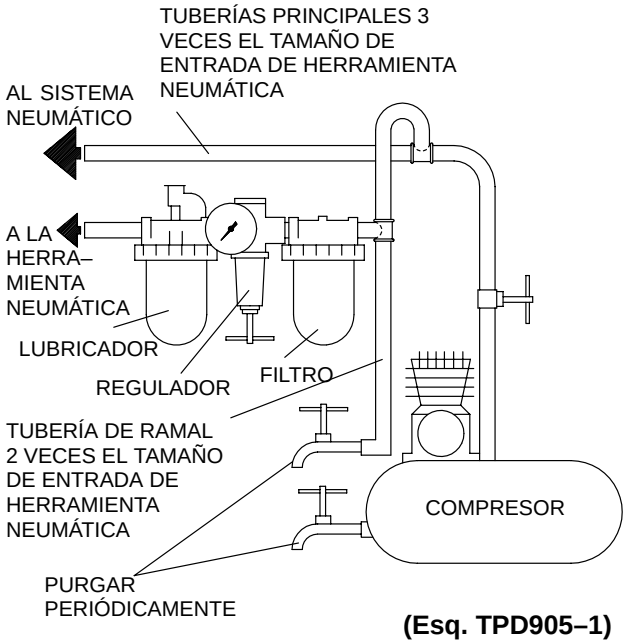
LUBRICACIÓN

Ingersoll–Rand Nº. 10 **Ingersoll Rand N°. 28**

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

EE. UU. – No. C18–03–FKG0–28

Después de cada 50 000 ciclos o cada mes (lo que ocurra primero) inyecte unos 6 cc de grasa Ingersoll–Rand Nº. 28 en el engrasador.



(Esq. TPD905–1)

ESPECIFICACIONES

Lijadora	**Regulador**	**Velocidad en vacío**	**Husillo y disco soporte**
		rpm	
7S30L	Palanca	3 000	5/8–11, 7”
7S48L	Palanca	4 800	5/8–11, 7”
7S60L	Palanca	6 000	5/8–11, 7”
Pulidora	**Regulador**	**Velocidad en vacío**	**Husillo y disco soporte**
		rpm	
7P24L	Palanca	2 400	5/8–11, 7”

P

MANUAL DE FUNCIONAMENTO E MANUTENÇÃO
LIXADORAS MODELOS 7S30L, 7S48L E 7S60L E POLIDORAS MODELO 7P24L

AVISO

As Lixadoras Modelos 7S30L, 7S48L e 7S60L e Polidoras Modelo 7P24L são concebidas para operações de lixamento e polimento padrões em aplicações de oficinas de reparação de automóveis e em fabicação de metais laminados.
A Ingersoll–Rand não é responsável por modificações, feitas pelo cliente em ferramentas, nas quais a Ingersoll–Rand 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 SEGUINTES 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 pol).**
- **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.**
- **Check for excessive speed and vibration before operating.**
- **O eixo da ferramenta pode continuar a girar brevemente após a pressão tenha 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 formigueiro ou dor. Procure assistência médica antes de retornar ao trabalho.**
- **Use acessórios recomendados pela Ingersoll–Rand.**
- **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 Ingersoll–Rand 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 Ingersoll–Rand mais próximo.

Envie Todos os Comunicados Para o Distribuidor ou Escritório da Ingersoll–Rand Mais Próximo.

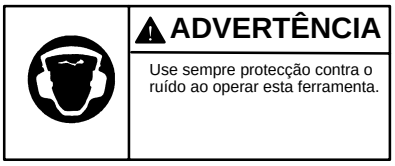
Impresso nos E.U.A.

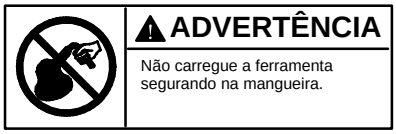
Ingersoll-Rand®

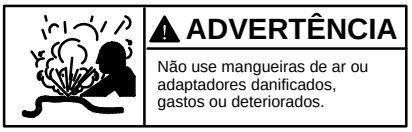
IDENTIFICAÇÃO DO RÓTULO DE ADVERTÊNCIA

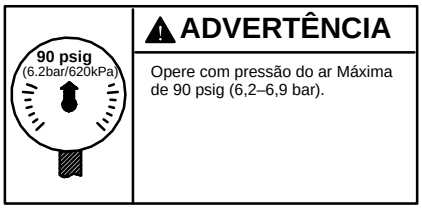
⚠ ADVERTÊNCIA

O NÃO CUMPRIMENTO DAS SEGUINTES ADVERTÊNCIAS PODE RESULTAR EM FERIMENTOS.









ADVERTÊNCIAS ESPECÍFICAS DA LIXADORA/POLIDORA

- **Estas Lixadoras e Polidoras irão operar com velocidade livre especificada na placa de identificação se a linha de alimentação de ar fornecer 6,2 bar/620 kPa (90psig) de pressão de ar na ferramenta. Operação a pressões de ar mais elevadas irá resultar em velocidade excessiva.**
- **Use somente almofadas de lixa, discos de lixa ou boína de polimento com estas ferramentas. Não use nenhum disco de esmerilamento, ou acessório de fresagem com estas ferramentas. Nunca use um acessório que tenha uma velocidade de operação menor do que a velocidade livre da Lixadora ou Polidora que está sendo usada.**
- **Quando usar uma almofada que tenha uma haste, insira a haste até a profundidade total na pinça. Quando usar uma almofada em uma árvore com roscas, certifique–se de que a porca da flange esteja seguramente apertada. Verifique o aperto da porca da pinça ou da porca da flange antes de operar uma Lixadora para estar certo de que ela não escapará durante a operação.**
- **Não tente desmontar o Controlador. O Controlador é disponível apenas como uma unidade e é garantido pela vida útil da ferramenta se não for cometido abuso na sua utilização**.

COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

LUBRIFICAÇÃO

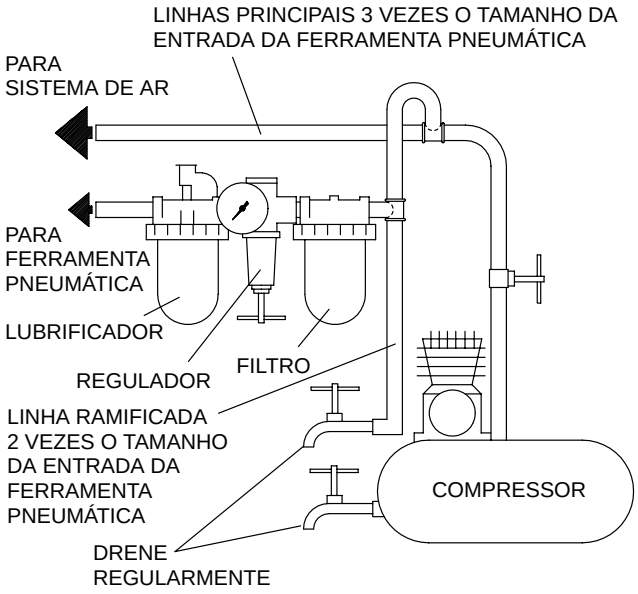
Ingersoll–Rand No. 10

Ingersoll–Rand No. 28

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

E.U.A. – No. C18–03–FKG0–28

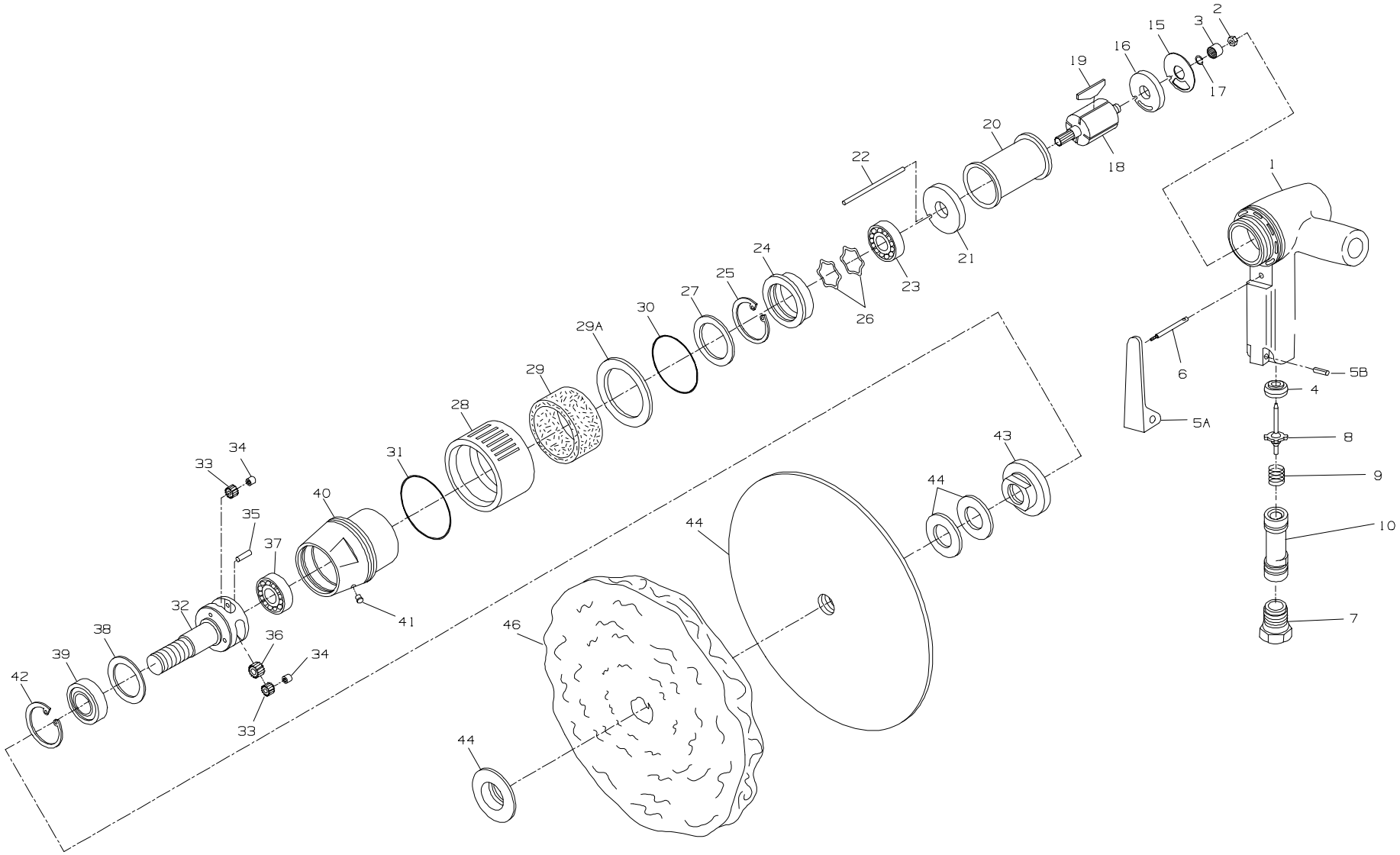
Depois de cada 50 000 ciclos ou cada mês, o que ocorrer primeiro, injecte aproximadamente 6 cc de Massa Lubrificadora Ingersoll–Rand no Adaptador de Massa Lubrificadora.



(Desenho TPD905–1)

ESPECIFICAÇÕES

Lixador	**Válvula Reguladora de Pressão**	**Velocidade Livre**	**Fuso e Coxim Traseiro**
		rpm	
7S30L	Alavanca	3 000	5/8–11, 7”
7S48L	Alavanca	4 800	5/8–11, 7”
7S60L	Alavanca	6 000	5/8–11, 7”
Polidor	**Válvula Reguladora de Pressão**	**Velocidade Livre**	**Fuso e Coxim Traseiro**
		rpm	
7P24L	Alavanca	2 400	5/8–11, 7”


1
2
3
4
5A
5B
6
7
8
9
10
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
29A
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
46

(Dwg. TPA908–6)

		PART NUMBER FOR ORDERING			PART NUMBER FOR ORDERING
+	1	Motor Housing Assembly		15	Rear End Plate Gasket 7AH–739
		for Models 7S60L, 7S48L, 7S30L		16	Rear End Plate 7AH–12
		and 7P24L	7S60L–A40	17	Rear End Plate Retainer 7AH–118
		for Models 7S60L–EU, 7S48L–EU,		18	Rotor
		7S30L–EU and 7P24L–EU	7S60L–EU–A40		for Model 7S30L 7S30–53
	*	Nameplate Kit			for all others 7S60–53
		for models ending in –EU	7S–EU–K301	19	Vane Packet (set of 4 Vanes) 7RL–42–4
		for all other models	7S–K301	20	Cylinder 7AH–3A
	*	Nameplate Screw (2)	BN403–302	21	Front End Plate 7AH–11
	*	Warning Label		22	Cylinder Dowel 7AH–98
		for models ending in –EU	EU–99	23	Front Rotor Bearing R1–22
		for all other models	WARNING–5–99	24	Front Rotor Bearing Housing 7S60–13
	2	Bearing Nut	7AH–105	25	Front Rotor Bearing Retainer W22–118
	3	Rear Rotor Bearing	7AH–24	26	Bearing Spring Washer (2) 7AH–278
	4	Throttle Valve Seat	2908–303	27	Bearing Housing Spacer 7AH–81
	5A	Throttle Lever (for Models		28	Exhaust Deflector 7S60–23A
		7S60L, 7S48L, 7S30L and 7P24L)	7S60L–273	29	Exhaust Silencer 7S60–311
	5B	Throttle Lever Pin (for Models		29A	Exhaust Diffuser 7S60–123
		7S60L, 7S48L, 7S30L and 7P24L)	7L–120	30	Exhaust Deflector Rear Seal DG20–103
	6	Throttle Plunger (for Models		31	Exhaust Deflector Front Seal AF160–291Z
		7S60L, 7S48L, 7S30L and 7P24L)	7S60–94		
	7	Inlet Bushing	402–565		
	8	Throttle Valve	LG2–302		
	9	Throttle Valve Spring	7S60–51		
	10	Valve Spring Spacer	2905P–198		

* Not illustrated.

\+ Whenever a new Motor Housing Assembly is installed, select the correct Nameplate from the Nameplate Kit and attach it to the Housing with the Nameplate Screws.

		PART NUMBER FOR ORDERING
	Arbor Assembly	
	for Model 7S60L	7S60–A4
	for Model 7S48L	7S48–A4
	for Model 7S30L	7S30–A4
	for Model 7P24L	7P24–A4
32	Arbor	
	for Model 7S60L	7S60–4
	for Model 7S48L	7S48–4
	for Model 7S30L	7S30–4
	for Model 7P24L	7P24–4
33	Arbor Planet Gear Assembly (3)	
	for Model 7S60L	7AH–A10
	for Model 7S48L	7AJ–A10
	for Model 7S30L	7AK–A10
	for Model 7P24L	7AL–A10
34	Planet Gear Bearing (1 for each Gear)	
	for Model 7S60L	7AH–500
	for Model 7S48L	7AJ–500
	for Models 7S30L and 7P24L	7AK–500
35	Arbor Planet Gear Shaft (3)	
	for Model 7S60L	R31–121
	for Model 7S48L	7S48–191
	for Models 7S30L and 7P24L	7P24–191
36	Rotor Pinion	
	for Model 7S60L	7AH–17
	for Model 7S48L	7AJ–17
37	Rear Arbor Bearing	7S60–97
38	Arbor Bearing Spacer	7AH–81
39	Front Arbor Bearing	R2H–97
40	Gear Case Assembly	7S60–A37
41	Grease Fitting	D0F9–879
42	Arbor Bearing Retainer	S12–118
43	Inner Wheel Flange	7S60–86
44	Sanding Pad Assembly (firm)	77A–BM825–7
46	Wool Pad (for 7P24L)	P500–850
*	Arbor Wrench (15/16”)	7RAQT4–254
*	Nameplate	7S60–301
*	Nameplate Screw (2)	BN403–302
*	Tune–up Kit (consists of illustrated parts 4, 8, 9, 15, 17, 19, 29, 30 and 31)	7S60–TK2
*	Warning Label	TA–7S60
*	Sanding Pad Assembly (medium)	77A–AM825–7

* Not illustrated.

MAINTENANCE SECTION

⚠ WARNING

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

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

LUBRICATION

Each time a Sander or Polisher is disassembled for maintenance and repair or replacement of parts, lubricate the tool as follows:

1. Work approximately 1.5 cc of Ingersoll–Rand No. 28 Grease into the Rear Rotor Bearing (3), Front Rotor Bearing (23), Rear Arbor Bearing (37) and Front Arbor Bearing (39).
2. Work approximately 4 to 6 cc of Ingersoll–Rand No. 28 Grease into the gear train. If the gear train is disassembled, grease the Planet Gear Bearings (34), the teeth of the Planet Gears (33), the teeth of the Rotor Pinion (36) and the Planet Gear Shafts (35). Work the grease into the gearing if the gear train is not disassembled. Grease the teeth inside the Gear Case (40).
3. Inject 1 to 2 cc of Ingersoll–Rand No. 10 Oil into the air inlet before attaching the air hose. Remove the Oil Chamber Plug and fill the oil chamber.
4. Moisten all O–rings with O–ring lubricant.

DISASSEMBLY

General Instructions

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

Disassembly of the Sander or Polisher

1. Sprag the Inner Wheel Flange (43) with a wrench and unscrew and remove the Sanding Pad Assembly (44) and the Pad Mounting Nut (44).
2. Remove the Pad Mounting Washers (44) from the Arbor (32).
3. Carefully grasp the handle of the Motor Housing (1) in a vise with leather–covered or copper–covered jaws so that the Arbor is upward.
4. Using a wrench on the flats of the Gear Case (40), loosen, but do not remove, the Gear Case.

NOTICE

Be certain to hold the tool over the workbench to prevent parts from becoming lost.

5. Remove the tool from the vise and, while keeping the arbor in a horizontal position, unscrew the Gear Case by hand and pull it away from the Motor Housing.

Disassembly of the Gear Case

1. Thread two 5/8–11 jam nuts onto the threaded end of the Arbor and lock them together near the end of the Arbor. Grasp the outermost jam nut in vise jaws and, with an open end wrench, loosen the Inner Wheel Flange (43). Unlock the two jam nuts, remove the Arbor and Gear Case from the vise and unscrew and remove the two jam nuts and the Inner Wheel Flange.
2. Using snap ring pliers, remove the Arbor Bearing Retainer (42) from the Gear Case.
3. Grasping the threaded end of the Arbor, pull the Arbor, Front Arbor Bearing (39), Arbor Bearing Spacer (38) and Rear Arbor Bearing (37) from the Gear Case.
4. Using a bearing puller, remove the Front Arbor Bearing from the Arbor.
5. Remove the Arbor Bearing Spacer.
6. Using a bearing puller, remove the Rear Arbor Bearing from the Arbor.
7. Press one of the Arbor Planet Gear Shafts (35) from the Arbor and slide the Arbor Planet Gear (33) and Planet Gear Bearing (34) from the Arbor.
8. **For Models 7S48L, and 7S60L,** slide the Rotor Pinion (36) out of the opening created by removing the Planet Gear.
9. Press the remaining Arbor Planet Gear Shafts from the Arbor and remove the remaining Arbor Planet Gears and Planet Gear Bearings.

NOTICE

Do not remove the Planet Gear Bearings from the Arbor Planet Gears unless you have new Bearings on hand for replacement. The old Bearings will be damaged during the removal process.

10. Press the Planet Gear Bearings from the Arbor Planet Gears.
11. Pull the Exhaust Deflector (28) from the Gear Case.
12. Remove the Exhaust Diffuser (29A) from the Exhaust Deflector or the hub of the Motor Housing.
13. Remove the Exhaust Deflector Front Seal (31) from the Gear Case.
14. Work the Exhaust Silencer (29) out of the Exhaust Deflector.

Disassembly of the Motor

1. If the Bearing Housing Spacer (27) remained with the assembled motor, remove it.
2. Remove the Front Rotor Bearing Housing (24) and the two Bearing Spring Washers (26).
3. Grasp the splined end of the Rotor and pull the assembled motor from the Motor Housing (1).
4. Using a pair of external snap–ring pliers with just the tips of the pliers inserted between the ends of the Rear End Plate Retainer (17), spread the Retainer enough to remove it from the groove in the hub of the Rotor.

CAUTION

Make certain the Retainer doesn't fly when it is slipped off the hub of the Rotor.

5. Withdraw the Rear End Plate (16), Cylinder (20) and Vanes (19)
6. While supporting the Front End Plate (21) between two blocks of wood on the table of an arbor press, press the Rotor from the Front Rotor Bearing (23). Check the Bearing for damage or roughness by slowly rotating it.

NOTICE

Do not remove the Rear Rotor Bearing (3) unless you have a new Bearing on hand for replacement. The old Bearing will be damaged during the removal process.

7. To remove the Rear Rotor Bearing, thread a No. 10–24 x 2" long cap screw, having at least 1/2" of thread, through the Bearing Nut (2) located behind the Bearing. Keep tightening the screw to jack the Bearing from the Motor Housing.

Disassembly of the Throttle

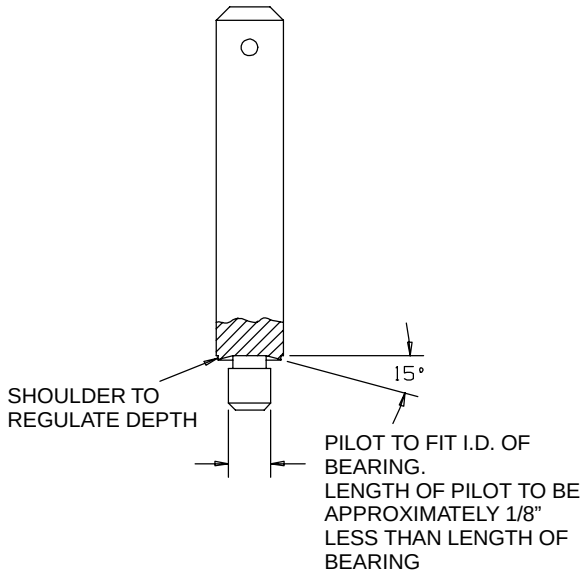
1. Remove the Inlet Bushing (7) and withdraw the Valve Spring Spacer (10), Throttle Valve Spring (9) and the Throttle Valve (8).
2. Remove the Throttle Lever Pin (5B), Throttle Lever (5A) and withdraw the Trigger Pin (6).
3. Do not remove the Throttle Valve Seat (4) unless you have a new one on hand for replacement. The old seat will be damaged during the removal process. To remove the Throttle Valve Seat, thread a 3/8–24 thread cap screw about 3" or 4" long into the Seat; grasp the head of the cap screw in a vise, and pull the Seat from the handle.

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. Except for bearings, always clean every part and wipe every part with a thin film of oil before installation.
5. Check every bearing for roughness. If an open bearing must be cleaned, wash it thoroughly in **clean** 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

1. Grasp the handle of the Motor Housing (1) in copper–covered vise jaws, positioning the handle so that the inlet end is upward.

NOTICE

Never install a used Throttle Valve Seat; always install a new one.

2. If the Throttle Valve Seat (4) was removed, use a flat–faced rod 1/2" (13 mm) in diameter and about 6" (150 mm) long to press a new Throttle Valve Seat into the handle until it seats.
3. While looking down through the bore of the Throttle Valve Seat, insert the Throttle Plunger (6) until the hole in the Trigger Pin is centered beneath the hole in the Throttle Valve Seat. Install Throttle Lever (5A) by aligning hole in the Throttle Lever with holes in Motor Housing (1) and inserting Throttle Lever Pin (5B).
4. Insert the Throttle Valve (8) so that the long–stem end passes through the hole in the Trigger Stem or Trigger Pin.
5. Insert the Throttle Valve Spring (9), small coil first, so that the spring encircles the Throttle Valve.
6. Install the Valve Spring Spacer (10), counterbored end first, into the handle. The large end of the Throttle Valve Spring should seat in the counterbore in the Oiler Body.
7. Thread the Inlet Bushing (7) into the bottom of the handle and tighten it to a minimum 25 ft–lb (33.9 Nm) torque.
8. Remove the Motor Housing from the vise.

Assembly of the Motor

1. If the Rear Rotor Bearing (3) was removed, install a new one as follows:
   a. Place the Bearing Nut (2) in the bore at the bottom of the bearing recess in the Motor Housing (1).
   b. Using a bearing inserting tool (see Drawing TPD786) that has a pilot extending into the Bearing, and a shoulder that contacts the outer radius on the bearing shell, press the Rear Rotor Bearing, unstamped end first, into the bearing recess until it is about 010" (0.25 mm) below flush.
   c. Inject a little grease in the Bearing.
2. Slide the Front End Plate (21), flat side first, over the splined end of the Rotor (18).
3. Using a sleeve that contacts only the inner ring of the Front Rotor Bearing (23), press the Front Rotor Bearing onto the splined hub of the Rotor until it seats against the Front End late.

NOTICE

The clearance between the Front End Plate and the Rotor is critical.

4. While holding the Front End Plate, gently tap the splined end of the Rotor until you can insert a 0.001" feeler gauge or shim between the face of the Rotor and End Plate.
5. Grasp the splined end of the Rotor in copper–covered vise jaws so that the short hub of the Rotor is upward.
6. Wipe each Vane (19) with a film of light oil and place a Vane in each slot in the Rotor.
7. Place the Cylinder (20), air port end trailing, down over the Rotor and against the Front End Plate.
8. Place the Rear End Plate (16), flat side first, over the short hub of the Rotor.
9. Install the Rear End Plate Retainer (17) in the groove on the rotor hub.

CAUTION

When installing the Rear End Plate Retainer (17), make certain it does not fly as you slip it on the hub of the Rotor.

10. Smear a film of light grease on the Rear End Plate Gasket (15) and place the Gasket on the End Plate so that the port in the Gasket is aligned with the port in the End Plate.
11. Using an assembly dowel 3/32" in diameter x 10" long (2.3 mm x 254 mm), align the dowel groove in the Front End Plate, Cylinder, Rear End Plate and Gasket. Place the assembly rod in the aligned grooves so that about 3" of the rod extends beyond the Rear End Plate. Insert the extension in the dowel hole at the bottom of the housing bore, and slide the motor into the Motor Housing until it seats.
12. Withdraw the assembly dowel and insert the Cylinder Dowel (22).
13. Place the two Bearing Spring Washers (26) inside the Front Rotor Bearing Housing (24) and against the Front Rotor Bearing Retainer (25).
14. Slide the Front Rotor Bearing Housing over the Front Rotor Bearing.
15. Install the Exhaust Deflector Rear Seal (30) on the Motor Housing.
16. Install the Exhaust Diffuser (29A) on the hub of the Motor Housing.

Assembly of the Gear

1. If the Planet Gear Bearings (34) were removed, press the new Bearings into the Arbor Planet Gears (33) using a bearing inserting tool (see drawing TPD786) that has a pilot and that contacts the outer radius of the Bearings. Press against the stamped end of the Bearing.
2. Smear Ingersoll–Rand No. 28 grease on the Bearings and teeth of the Planet Gears.
3. Using blocks or a ring on the table of an arbor press, place the large shoulder of the Arbor (32), threaded end down, on the blocks or the ring.
4. Position one of the assembled Arbor Planet Gears in one of the machined Arbor openings, carefully aligning the center of the Gear with the hole in the shoulder of the Arbor, and press one of the Arbor Planet Gear Shafts (35) into the Arbor and through the Gear. Make certain both ends of the Shaft are below the faces of the Arbor.
5. Repeat the previous step with the second Planet Gear.
6. **For Models 7S48L, and 7S60L,** grease the teeth of the Rotor Pinion (36) and insert it into the center of the Arbor through the remaining machined opening. Make certain the teeth of the Rotor Pinion mesh with the teeth of the Planet Gears.
7. Install the remaining Arbor Planet Gear making certain all gearing meshes and moves freely.

CAUTION

Do not press against the Rear Arbor Bearing.

8. Press the Rear Arbor Bearing (37) onto the shaft at the unthreaded end of the Arbor.
9. Reposition the Arbor on the pressing table with the threaded end up.
10. Position the Arbor Bearing Spacer (38) on the Arbor and press the Front Arbor Bearing (39), shielded side up, onto the Arbor.
11. Smear some grease on the internal spline of the Gear Case (40) and insert the assembled Arbor, gearing end fast, into the unsplined end of the Gear Case. Make certain the teeth of the Planet Gears mesh with the teeth in the Gear Case.
12. Using snap ring pliers, install the Arbor Bearing Retainer (42) in the front end of the Gear Case.
13. Thread the Inner Wheel Flange (43) onto the Arbor. Using two 5/8–11 jam nuts on the end of the Arbor, tighten the Inner Wheel Flange.
14. Lubricate and install the Exhaust Deflector Front Seal (31) in the annular groove of the Gear Case.
15. Being careful not to cut the Seal, slide the smaller end of the Exhaust Deflector (28) onto the Gear Case until it butts against the shoulder of the Gear Case.
16. If the Exhaust Silencer (29) was removed, fold the Silencer in half lengthwise and work it into the open area between the Exhaust Deflector and the Gear Case.

Assembly of the Tool

1. Grasping the handle of the Motor Housing in a vise with the spline of the Rotor upward, place the Bearing Housing Spacer (27) on the face of the Front Rotor Bearing Housing.
2. Position the Gear Case and Exhaust Deflector over the Motor Housing and while slowly rotating the Arbor to align the Planet Gears with the spline of the Rotor, screw the Gear Case onto the Motor Housing. Make certain the Exhaust Deflector Rear Seal is not cut while threading the Gear Case onto the Motor Housing.
3. With a torque wrench on the flats on the Gear Case, tighten the Gear Case to between 50 to 60 ft–lb (67.8 to 81.4 Nm) torque.
4. Install the Pad Mounting Spacers (44) on the Arbor.
5. Thread the Sanding Pad (46) and the Pad Mounting nut onto the Arbor.
6. Spin the Sanding Pad by hand to make certain nothing is binding and remove the tool from the vise.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE

Trouble	Probable Cause	Solution
Low power or low free speed	Low air pressure at the Inlet	Check the air pressure at the Inlet. The pressure must not exceed 90 psig (6.2 bar/620 kPa).
	Plugged Inlet Bushing Screen	Clean the Screen in a clean, suitable, cleaning solution. If it cannot be cleaned, replace it. **⚠ WARNING** **Never operate a Sander or Polisher without an Inlet Screen. Ingestion of dirt into the Sander or Polisher can, in some cases, cause an unsafe condition.**
	Worn or broken Vanes	Replace the **complete** set of Vanes.
	Worn or broken Cylinder	Replace the Cylinder if it is worn or broken or if the bore is scored or wavy.
	Improper lubrication or dirt build–up in the motor	Lubricate the Sander or Polisher as instructed in **LUBRICATION**. If lubrication does not result in satisfactory operation, disassemble the motor, inspect and clean all parts.
Rough operation	Worn or broken Rear Rotor Bearing or Front Rotor Bearing	Examine each Bearing. Replace the Rear Rotor Bearing Seal Assembly if worn or damaged or replace the Front Rotor Bearing.
	Bent Arbor	Mount the Arbor on centers. Check the bearing diameter runout with an indicator. Replace the Arbor if runout exceeds .002” Total Indicator Reading.
Scoring	Improper assembly	Make certain that all motor parts are properly aligned prior to clamping the motor assembly.
	Rotor Bearing Seal misalignment	Loosen the Cylinder Case Screws. Rotate the Spindle by hand to align the Seal. Retighten the Screws to 14 ft–lb (19 Nm) torque. The Spindle must rotate freely.
Air leaks	Worn Valve Throttle and/or Throttle Valve Seat	Replace worn parts.
	Oil Chamber Plug worn or not tight	Tighten the Plug. If the problem persists, replace it.

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.