

OPERATION AND MAINTENANCE MANUAL FOR MODELS 1701B1 AND 1701P1 IMPACTTOOLS

NOTICE

Models 1701B1 and 1701P1 Impacttools are designed for production and maintenance use in light equipment 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 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 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.
- Note the position of the reversing lever before operating the tool so as to be aware of the direction of rotation when operating the throttle.
- 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 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.
- Use only impact sockets and accessories. Do not use hand (chrome) sockets or accessories.
- Impact wrenches are not torque wrenches. Connections requiring specific torque must be checked with a torque meter after fitting with an impact wrench.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

NOTICE

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

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

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

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PROFESSIONAL TOOLS

WARNING LABEL IDENTIFICATION



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.

International Warning Label:
Order Part No. _____

PLACING TOOL IN SERVICE

LUBRICATION



Ingersoll-Rand No. 50

Ingersoll-Rand No. 100

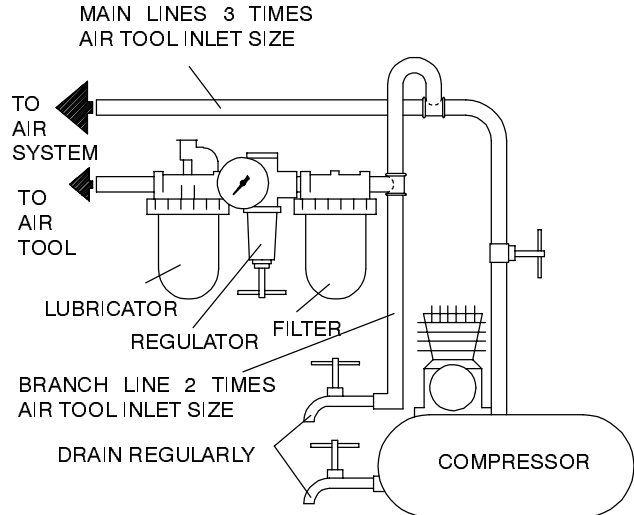
Always use of an air line lubricator with these tools.
We recommend the following Filter-Lubricator-Regulator Unit:

For International- No. C26-C4-A29

For USA- No. C22-04-G00

After each eight hours of operation, unless an air line lubricator is used, inject 1.5 cc of Ingersoll-Rand No. 50 Oil into the inlet of the tool and run the tool briefly.

After each forty-eight hours of operation, or as experience indicates, inject about 3 cc of Ingersoll-Rand No. 100 Grease into the Grease Fitting (19A, 31).



(Dwg. TPD905-1)

MANUEL D'EXPLOITATION ET D'ENTRETIEN DES CLÉS A CHOCS DES SÉRIES 1701B1 ET 1701P1

NOTE

Les clés à chocs Modèles 1701B1 et 1701P1 sont destinées à la production et à l'entretien des applications des petits équipements.

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 SECURITÉ SONT JOINTES.
LIRE CE MANUEL AVANT D'UTILISER L'OUTIL.
L'EMPLOYEUR EST TENU À 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 volatils tels que le kérosène, le gasol ou le carburant d'aviation.
- Ne retirer aucune étiquette. Remplacer toute étiquette endommagée.
- Tenir les mains, les vêtements flous et les cheveux longs, éloignés de l'extrémité rotative de l'outil.
- Noter la position du levier d'inversion avant de mettre l'outil en marche de manière à savoir dans quel sens il va tourner lorsque la commande est actionnée.
- 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 Ingersoll-Rand.
- N'utiliser que les douilles et les accessoires pour clés à chocs. Ne pas utiliser les douilles et accessoires (chromés) de clés manuelles.
- Les clés à chocs ne sont pas des appareils dynamométriques. Les connexions nécessitant un couple de serrage spécifique doivent être vérifiées avec un mesureur de couple après avoir été assemblées avec un clé à chocs.
- Cet outil n'est pas conçu pour fonctionner dans des atmosphères explosives.
- Cet outil n'est pas isolé contre les chocs électriques.

NOTE

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

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

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

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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).

Étiquette d'avertissement internationale:
Commander Pièce No. _____



MISE EN SERVICE DE L'OUTIL

LUBRIFICATION



Ingersoll-Rand No. 50



Ingersoll-Rand No. 100

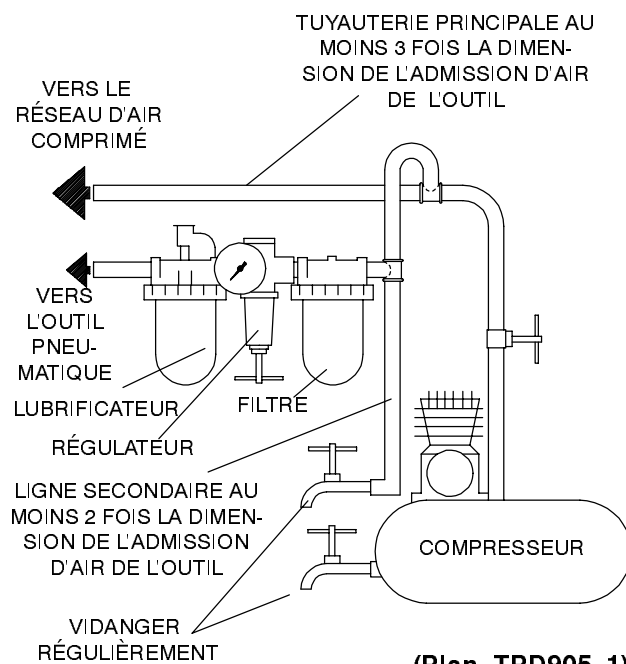
Utiliser toujours un lubrificateur avec ces outils. Nous recommandons l'emploi du filtre-régulateur-lubrificateur suivant :

International - No. C26-C4-A29

ÉU - No. C22-04-G00

Toutes les huit heures de fonctionnement, si un lubrificateur de ligne n'est pas utilisé, injecter 1,5 cm³ d'huile Ingersoll-Rand No. 50 dans le raccord d'admission de l'outil et faire marcher l'outil brièvement.

Toutes les quarante-huit heures de fonctionnement, ou en fonction de l'expérience, injecter environ 3 cm³ de graisse Ingersoll-Rand No. 100 dans le raccord de graissage (19A, 31).

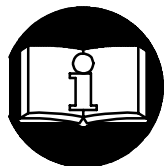


(Plan TPD905-1)

MANUAL DE USO Y MANTENIMIENTO PARA LLAVES DE IMPACTO DE LAS SERIES 1701B1 Y 1701P1

NOTA

Las llaves de impacto modelos 1701B1 y 1701P1 están diseñadas para trabajos ligeros de producción y mantenimiento de equipos. 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 USAR 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 seguridad, máximo rendimiento y vida de servicio de las piezas, use esta herramienta a una presión de aire máxima de 90 psig (6,2 bar/ 620 kPa) en la 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 accesorios dañados, desgastados ni deteriorados.
 - Asegúrese de que todas las mangueras y accesorios sean del tamaño correcto y estén seguros. Vea Esq. TPD905-1 para un típico arreglo de tuberías.
 - Use siempre aire limpio y seco a una presión máxima de 90 psig. El polvo, los gases corrosivos y/o el exceso de humedad podrían 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.
- USO DE LA HERRAMIENTA**
- Use siempre protección ocular cuando maneje, o realice operaciones de mantenimiento en esta herramienta.
 - Use siempre protección para los oídos cuando maneje esta herramienta.
- Mantenga las manos, la ropa suelta y el cabello largo alejados del extremo giratorio de la herramienta.
 - Note la posición de la palanca de inversión antes de hacer funcionar la herramienta para ser consciente de su dirección giratoria cuando funcione el estrangulador.
 - Anticipe y esté alerta sobre los cambios repentinos en el movimiento durante la puesta en marcha y el manejo de toda herramienta motorizada.
 - Mantenga una postura de cuerpo equilibrada y firme. No estire demasiado los brazos al manejar la herramienta. Pueden ocurrir reacciones de alto par a, o a menos de, la recomendada presión de aire.
 - El eje de la herramienta podría seguir girando brevemente después de haber soltado la palanca de estrangulación.
 - Las herramientas neumáticas pueden vibrar durante el uso. La vibración, repetición o posiciones incómodas pueden dañarle los brazos y manos. En caso de incomodidad, sensación de hormigueo o dolor, deje de usar la herramienta. Consulte a un médico antes de volver a usarla otra vez.
 - Utilice únicamente los accesorios Ingersoll-Rand recomendados.
 - Utilice únicamente bocas y accesorios para llaves de impacto. No utilice bocas o accesorios manuales (cromados).
 - Las llaves de impacto no son llaves de par. Las uniones que requieran pares específicos deberán ser comprobadas con un torsiómetro después de haberlas fijado con una llave de impacto.
 - 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 podría 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 Ingersoll-Rand autorizado más próximo.

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

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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 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.



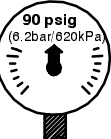
⚠ ADVERTENCIA
No coger la herramienta por la manguera para levantarla.



⚠ 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. _____



PARA PONER LA HERRAMIENTA EN SERVICIO

LUBRICACIÓN



Ingersoll-Rand Nº 50



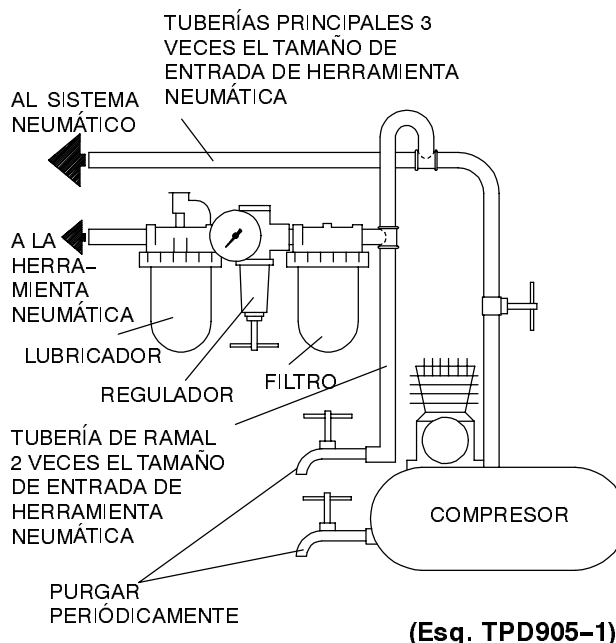
Ingersoll-Rand Nº 100

Utilice siempre un lubricante de aire comprimido con esta herramienta. Recomendamos la siguiente unidad de Filtro-Lubricador-Regulador:

Internacional - Nº. C26-C4-A29

Para EE.UU. - Nº. C22-04-G00

Después de cada ocho horas de operación, a menos que se use un lubricador de línea de aire comprimido, inyecte 1,5 cc de Aceite Ingersoll-Rand Nº 50 en la admisión de herramienta y haga funcionar la herramienta, brevemente. **Después de cada cuarenta y ocho horas de funcionamiento**, o según indique la experiencia, inyecte unos 3 cc de Grasa Ingersoll-Rand Nº 100 en el Engrasador (19A, 31).



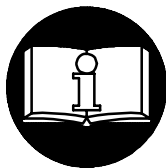
MANUAL DE FUNCIONAMENTO E MANUTENÇÃO PARA FERRAMENTAS DE PERCUSSÃO SÉRIES 1701B1 E 1701P1

P

AVISO

As Ferramentas de Percussão Modelos 1701B1 e 1701P1 são concebidas para emprego de produção e manutenção em aplicações de equipamento ligeiro. 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 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).
- 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.
- Observe qual é a posição da alavanca que reverte o sentido de rotação antes de operar esta ferramenta de modo a estar atento ao sentido de rotação quando operar o regulador de pressão.
- 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.
- O eixo da ferramenta pode continuar a rotacionar 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.
- Use somente soquetes e acessórios de impacto. Não use soquetes ou acessórios de mão (cromo).
- As Ferramentas Pneumáticas não são Ferramentas Pneumáticas de aperto. Conexões requerendo torque específico devem ser verificadas com um torquímetro depois de adaptadas, com uma ferramenta pneumática de impacto.
- 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.

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IDENTIFICAÇÃO DO RÓTULO DE ADVERTÊNCIA

⚠️ ADVERTÊNCIA

O NÃO CUMPRIMENTO DAS SEGUINTE ADVERTÊNCIAS PODE RESULTAR EM FERIMENTO.




⚠️ 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 formiguento 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 90-100 psig (6,2-6,9 bar).

Rótulo de Advertência Internacional No. de Referência para Pedido _____



COLOCANDO A FERRAMENTA EM FUNCIONAMENTO

LUBRIFICAÇÃO



Ingersoll-Rand No. 50 Ingersoll-Rand No. 100

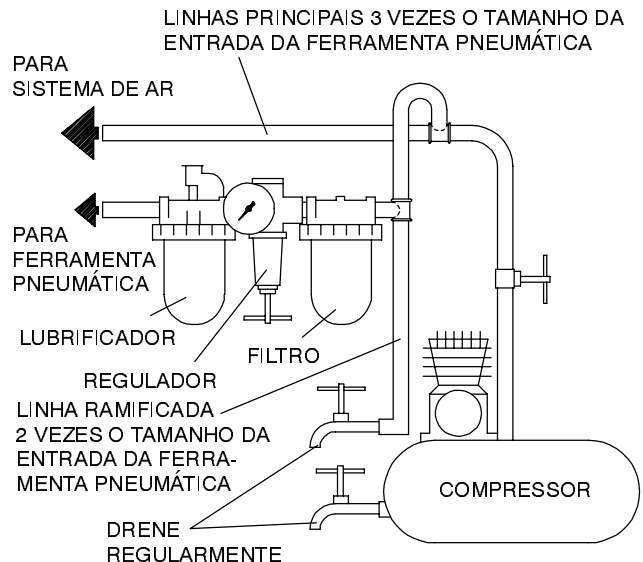
Use sempre um lubrificador de ar de linha com estas ferramentas. Nós recomendamos a seguinte Unidade Filtro-Lubrificador-Regulador:

Para Internacional - No. C26-C4-A29

Para USA - No. C22-02-G00

Depois de cada 8 horas de operação, ao menos que se use um lubrificador de ar de linha, injecte 1,5 cc de Óleo Ingersoll-Rand No. 50 na entrada de ar e coloque a ferramenta e funcionamento brevemente.

Depois de quarenta e oito horas de operação, ou como indicar a experiência, injecte cerca de 3cc de Massa Lubrificadora Ingersoll-Rand No. 100 no Adaptador (19A.31).



(Desenho TPD905-1)

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Motor Housing Assembly	1701B-A40	◆	25	Front Rotor Bearing	R00H-97
2	Throttle Valve Assembly	R000B2-302		26	Cylinder Dowel	HH92-74
◆•	3 Throttle Valve Face	401-159		28	Hammer Frame Assembly	1702-A703A
◆•	4 Throttle Valve Spring	5081T-151		30	Hammer Pin (2)	1702-704
5	Throttle Lever	201-273	◆•	31	Hammer Case Gasket	401-36
6	Throttle Lever Pin	502B-120		32	Hammer Case Cap Screw (3)	1702-638
	Air Inlet Assembly	1701B-A166		33	Hammer Case Assembly	1701B-A727
7	Swivel Inlet Body	1701B-165		34	Hammer Case Bushing	401-641
8	Swivel Inlet Assembly	1702B-B166		35	Hammer Case Shield	201-109
◆•	9 Swivel Inlet Seal (2)	R18LF-21		*	Hammer Case Label	WARNING-2-99
10	Reverse Valve Assembly	201-A329		*	.005" oversize Hammer Case Bushing	401-641-5
◆•	11 Reverse Valve Seal	R00B1-159		37	Hammer Frame Washer	1702-706
◆•	12 Reverse Valve Bushing Seal	R1A-159		38	Hammer	1702-706
13	Reverse Valve Stop	401-665		39	3/8" Square Drive Anvil Assembly (with Pin-Type Retainer)	1702-P726
14	Grease Fitting	130SR-188		◆•	40 Socket Retaining Plunger	5020-716
15	Nameplate	1701B-301	◆•	41	Retaining Plunger Spring	401-718
16	Nameplate Screw (2)	BN403-302		42	3/8" Square Drive Anvil Assembly (with Ring-Type Retainer)	1702-A626
◆•	17 End Plate Gasket	401-739		43	Socket Retainer Ring	1702-425
◆•	18 Rear Rotor Bearing Retainer	MF-18		•	44 Retainer Support Ring	1702-426
◆	19 Rear Rotor Bearing	401-22				
20	Rear End Plate	201-12				
21	Cylinder	401-3				
◆•	22 Vane Packet (set of 6 Vanes)	401-42A-6				
23	Front End Plate	201-11				
24	Rotor	401-53				

MAINTENANCE SECTION

* Not illustrated.

◆ Indicates Tune-up Kit part.

• 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.

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

	Quick-Change Anvil Assembly	1702-A926-4	*	Quick Change Chuck	
46	Quick-Change Anvil (1/4" hex recess) . . .	1702-926-4		for 1/4" hex shank accessories	2U-A925-4
47	Retaining Sleeve	2U-930-4		for 7/16" hex shank	502-A925-7
48	Retaining Sleeve Spring	2U-931-4	*	Vertical Hanger	1901-365
49	Retainer Sleeve Stop	2U-933-4	*	Horizontal Hanger	1901-366
50	Retainer Ball	2U-696	*	Lube Injector	230-228
51	Thrust Ring	I0A902A2-932-4	*	Bottle of Oil	405-M01
52	Thrust Ring Lock	5C1-853	*	Tube of Grease	201-MG1
	Quick-Change Anvil Assembly	1702-A926-7	*	Carrying Case	401-4
53	Quick-Change Anvil	1702-926-7	*	Tune-up Kit (includes illustrated parts 3, 4	
54	Quick-Change Anvil Body			9[2], 11, 12, 17, 18, 19, 22, 25,31, 40 and 41)	1702B-TK2
	(7/16" hex recess)	I0A902A5-925			
55	Body Lock Pin	I0A902A5-936			
56	Thrust Ring Lock	4U-933-7			
57	Thrust Ring	4U-932-7			
58	Retaining Sleeve Spring	4U-931-7			
59	Retaining Ball (7/32" dia. steel ball)	2U-722			
60	Retaining Sleeve	I0A902A5-930			

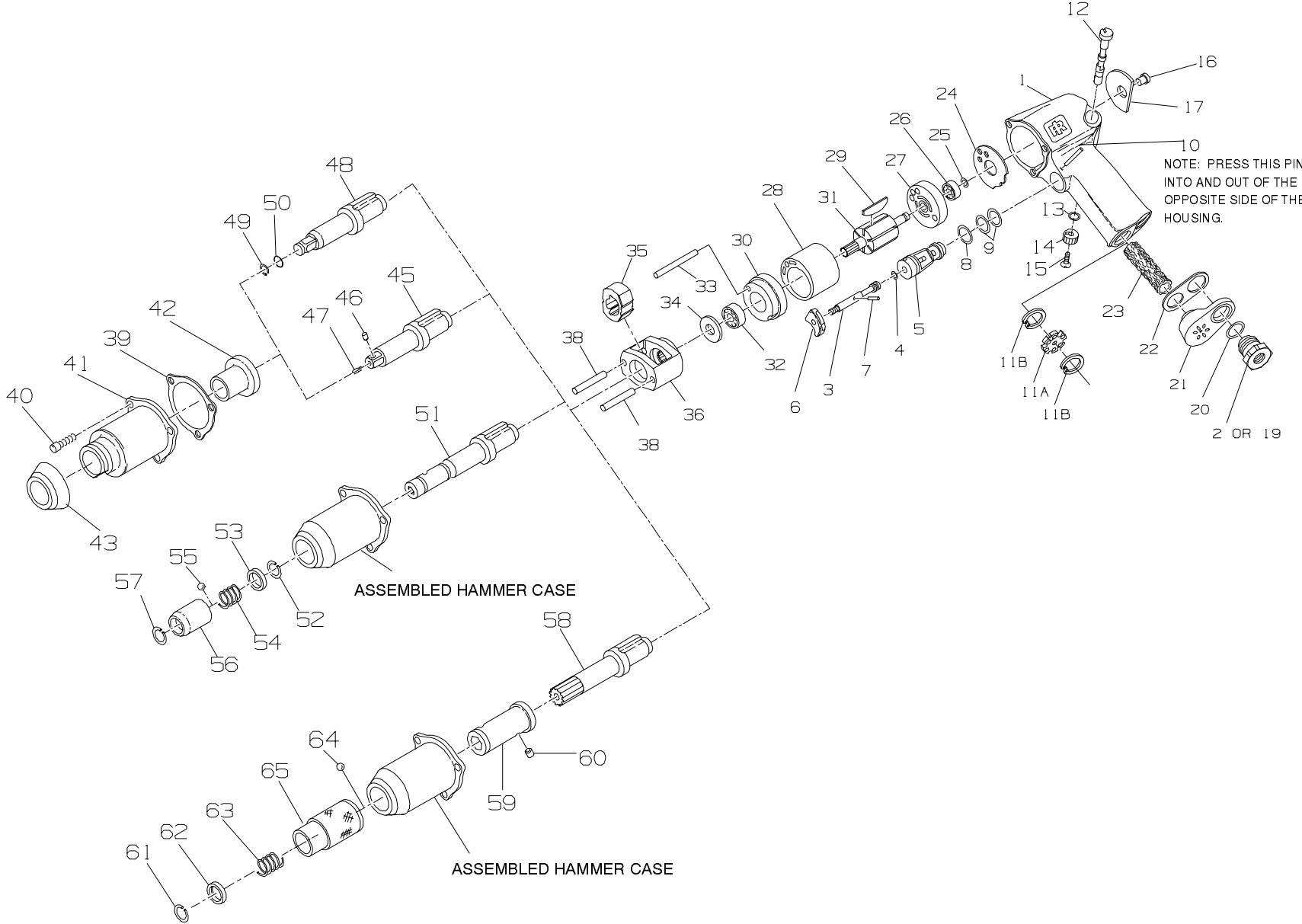
* Not illustrated.

◆ Indicates Tune-up Kit part.

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MODEL 1701P1

12



NOTE: PRESS THIS PIN INTO AND OUT OF THE OPPOSITE SIDE OF THE HOUSING.

MAINTENANCE SECTION

(Dwg. TPA868-3)

PART NUMBER FOR ORDERING

PART NUMBER FOR ORDERING

1	Motor Housing Assembly	1701P-A40	◆•	24	End Plate Gasket	202-739	
2	Inlet Bushing	I0A902A1-565	◆•	25	Rear Rotor Bearing Retainer	MF-18	
	Throttle Valve Assembly	202-A302	◆	26	Rear Rotor Bearing	401-22	
3	Throttle Valve	202-302		27	Rear End Plate	201-12	
•	Throttle Valve Face	R000BR1C-283		28	Cylinder	401-3	
5	Throttle Valve Bushing	202-503	◆•	29	Vane Packet (set of 6 Vanes)	401-42-6	
6	Trigger	5RA-93	◆	30	Front End Plate	201-11	
7	Throttle Valve Retainer Pin	AF120-322		32	Front Rotor Bearing	R00H-97	
◆•	Bushing 0-ring, Large	410-283		33	Cylinder Dowel	HH92-74	
◆•	Bushing 0-ring, Small (2)	202-290		34	Hammer Frame Washer	1702-706	
10	Bushing Retaining Pin	R100B-120		35	Hammer	1702-724A	
11A	Exhaust Deflector	1702P-123		36	Hammer Frame Assembly	1702-A703A	
11B	Exhaust Deflector Retaining			38	Hammer Pin (2)	1702-704	
	Ring (2)	2908-304	◆•	39	Hammer Case Gasket	401-36	
12	Reverse Valve	1701P-329		40	Hammer Case Cap Screw (3)	1702-638	
◆•	Reverse Valve Bushing 0-ring (2)	R1A-159		41	Hammer Case Assembly	1701B-A727	
14	Reverse Valve Knob	1701P-666		42	Hammer Case Bushing	401-641	
15	Knob Screw	WWA100-77		43	Hammer Case Shield	201-109	
16	Grease Fitting	130SR-188		*	Hammer Case Label	WARNING-2-99	
17	Nameplate	1701P-301		*	.005" oversize Hammer Case Bushing	401-641-5	
	Exhaust Muffler Kit	212-K23		45	3/8" Square Drive Anvil Assembly (with Pin-Type Retainer)	1702-P726	
19	Inlet Bushing Assembly	202-A565		◆•	46	Socket Retaining Plunger	5020-716
◆•	Bushing 0-ring	202-103	◆•	47	47	Retaining Plunger Spring	401-718
21	Exhaust Deflector	202-23					
◆•	Deflector Gasket	202-223					
◆•	Exhaust Silencer	728-310					

MAINTENANCE SECTION

* Not illustrated.

◆ Indicates Tune-up Kit part.

• 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.

PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



48	3/8" Square Drive Anvil Assembly (with Ring-Type Retainer)	1702-A626	*	Quick-Change Chuck for 1/4" hex shank accessories	2U-A925-4
• 49	Socket Retainer Ring	1702-425		for 7/16" hex shank accessories . . .	502-A925-7
• 50	Retainer Support Ring	1702-426	*	Vertical Hanger	1901-365
	Quick-Change Anvil Assembly	1702-A926-4	*	Horizontal Hanger	1901-366
51	Quick-Change Anvil (1/4" hex recess)	1702-926-4	*	Lube Injector	230-228
52	Thrust Ring Lock	5C1-853	*	Bottle of Oil	405-M01
53	Thrust Ring	I0A902A2-932-4	*	Tube of Grease	201-MG1
54	Retaining Sleeve Spring	2U-931-4	*	Tune-up Kit (includes illustrated parts 4, 8, 9[2], 13[2], 20, 22, 23, 24, 25, 26, 29, 32, 39, and 47)	1702P-TK2
55	Retaining Ball (5/32" dia. steel ball)	2U-696			
56	Retaining Sleeve	2U-930-4			
57	Retaining Sleeve Stop	2U-933-4			
	Quick Change Anvil Assembly	1702-A926-7			
58	Quick-Change Anvil	1702-926-7			
59	Quick-Change Anvil Body (7/16" hex recess)	I0A902A5-925			
60	Body Lock Pin	I0A902A5-936			
61	Thrust Ring Lock	4U-933-7			
62	Thrust Ring	4U-932-7			
63	Retaining Sleeve Spring	4U-931-7			
64	Retaining Ball (7/32" dia. steel ball)	2U-722			
65	Retaining Sleeve	I0A902A5-930			

MAINTENANCE SECTION

* Not illustrated.

- To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

MAINTENANCE SECTION

WARNING

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

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

LUBRICATION

Each time a Model 1701 Impactool is disassembled for maintenance and repair or replacement of parts, lubricate the tool as follows:

1. Work approximately 3 cc of Ingersoll-Rand Impactool Grease No. 100 into the impact mechanism.
2. **For 1701B**, coat the front portion of the Anvil (39, 42, 46 or 53) with a small amount of Ingersoll-Rand No. 100 Grease before applying the Hammer Case Assembly (38).
For 1701P, coat the front portion of the Anvil (45, 48, 51 or 58) with a small amount of Ingersoll-Rand No. 100 Grease before applying the Hammer Case Assembly (40).
3. Inject 1.5 cc of Ingersoll-Rand No. 50 Oil into the inlet of the tool after reassembly.

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

Disassembly of the Impact Mechanism for 1701B

1. Grasp the Motor Housing (1) in vise jaws, square driver upward.
2. Remove the Hammer Case Cap Screws (32) and withdraw the Hammer Case (33) and Hammer Case Gasket (31) from the Housing.
3. Grasp the Hammer Frame (28) and carefully lift off the entire impact mechanism, making certain you do not drop the two Hammer Pins (36).
4. Set the mechanism on a workbench, driver end up.
5. Grasp the Anvil (39, 42, 46 or 53) and lift it from the impact mechanism.
6. Remove the two Hammer Pins and Hammer (38).

Disassembly of the Impact Mechanism for 1701P

1. Grasp the Motor Housing (1) in vise jaws, square driver upward.
2. Remove the Hammer Case Cap Screws (40) and withdraw the Hammer Case (46) and Hammer Case Gasket (39) from the Housing.
3. Grasp the Hammer Frame (36) and carefully lift off the entire impact mechanism, making certain you do not drop the two Hammer Pins (38).
4. Set the mechanism on a workbench, driver end up.
5. Grasp the Anvil (45, 48, 51 or 58) and lift it from the impact mechanism.
6. Remove the two Hammer Pins and Hammer (35).

Disassembly of the Motor for 1701B

1. Grasp the splined end of the Rotor (24) and pull the entire motor from the Housing.
2. Lift off the Hammer Frame Washer (37).
3. Lift off the Front End Plate (23). If the Front Rotor Bearing (25) needs to be replaced, press it from the Front End Plate.
4. Remove the Cylinder (21) and the Vanes (29).
5. Remove the Rear Rotor Bearing Retainer (25) and slide the Rear End Plate (37) and Rear Rotor Bearing (26) off the short hub of the Rotor.
6. Remove the End Plate Gasket (24) from the Motor Housing.

Disassembly of the Motor for 1701P

1. Grasp the splined end of the Rotor (31) and pull the entire motor from the Housing.
2. Lift off the Hammer Frame Washer (34).
3. Lift off the Front End Plate (30). If the Front Rotor Bearing (34) needs to be replaced, press it from the Front End Plate.
4. Remove the Cylinder (28) and the Vanes (29).
5. Remove the Rear Rotor Bearing Retainer (25) and slide the Bearing (26) and Rear End Plate (27) off the short hub of the Rotor.
6. Remove the End Plate Gasket (24) from the Motor Housing.

Disassembly of Reverse Valve, Throttle and Inlet for 1701B

NOTICE

The Valve Stop (13) is installed with Loctite (R)*.

1. Unscrew the Reverse Valve Stop from the Reverse Valve (10).
2. Slowly rotate the Reverse Valve back and forth while withdrawing it from the reverse valve bushing. Remove the Reverse Valve Seal (11) from the Reverse Valve and the Bushing Seal (12) from the undercut inside the reverse valve bushing.

MAINTENANCE SECTION

3. Using a punch, carefully drive the Throttle Lever Pin (6) from the Motor Housing and remove the Throttle Lever (5).
4. Hold the Motor Housing firmly in a vise, taking care not to distort the motor bore. Using a wrench on the machined flats and turning counterclockwise, remove the Swivel Inlet Body (7).
5. Remove the Swivel Inlet Assembly (8) and Seals (9) from the Swivel Inlet Body. Remove the the Inlet Assembly Spacer (6B).
6. Withdraw the Throttle Valve Spring (4) and Throttle Valve (2). Remove the Throttle Valve Face (3) from the Throttle Valve.

Disassembly of Reverse Valve, Throttle and Inlet for 1701P

NOTICE

The Knob Screw is installed with Loctite (R).

1. Unscrew and remove the Knob Screw (15). Remove the Reverse Valve Knob (14).
2. Slowly rotate the Reverse Valve (12) back and forth while withdrawing it from the reverse valve bushing.
3. Remove the two Reverse Valve O-rings (13) from the undercut at each end of the reverse valve bushing.
4. Using a pin punch, tap out the Bushing Retaining Pin (10) from left to right while facing the back of the tool. Remove the entire Throttle Valve Assembly.
5. If it is necessary to replace the Trigger (16), pull it off the Throttle Valve (30).
6. Remove the Large Bushing O-ring (8) and one Small Bushing O-ring (9) from the Throttle Valve Bushing (5). Remove the other Small Bushing O-ring (9) seated in the recess of the handle.
7. Using a pin punch, tap out the Throttle Valve Retaining Pin (7) to release the Throttle Valve from the Throttle Valve Bushing.
8. Remove the Throttle Valve Face (14) from the annular groove at the end of the Throttle Valve.
9. Unscrew and remove the Inlet Bushing (2).

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 with threaded parts and housings.
4. Always clean every part, and wipe every part with a thin film of oil before installation.
5. Always apply O-ring lubricant to O-rings before assembly.

Assembly of Reverse Valve, Throttle and Inlet for 1701B

1. Place a new Swivel Inlet Seal (9) in each counterbore in the Swivel Inlet (8) and slide the Inlet over the threaded end of the Swivel Inlet Body.
2. Install a new Throttle Valve Face (3) in the groove on the Throttle Valve (2) and insert the assembled Throttle Valve, stem first, into the tapped hole in the Motor Housing (1).
3. Next, insert the Throttle Valve Spring (4) into the tapped hole in the Housing and retain the Throttle parts with the Swivel Inlet. Thread the Inlet into the tapped hole clockwise and tighten between 23 and 27 ft-lb (31.2 and 36.6 Nm) torque.
4. Align the holes in the Throttle Lever (5) with the holes in the boss on top of the Motor Housing and press the Throttle Lever Pin (6) into the through hole. Depress the Throttle Lever several times to check freeness of movement.
5. Insert a new Bushing Seal (12) into the undercut inside the reverse valve bushing, making certain it is firmly seated.
6. Install a new Reverse Valve Seal (12) in the groove closest to the hexagon end on the Reverse Valve (10).

CAUTION

When installing the Valve, rotate the Valve back and forth slowly, being careful not to damage the Seals when inserting the Valve in the bushing.

Coat the Reverse Valve with a small amount of the recommended oil and insert the tapered end of the Valve into the Housing bushing from left to right when facing the rear of the tool until the tapered end of the Valve protrudes from the right side of the Housing.

7. Apply Loctite No. 242 (R)* to the first two or three threads of the Reverse Valve Stop (13) and thread the Stop into the tapped end of the Reverse Valve. Tighten the Stop between 8 and 15 in-lb (.9 and 1.7 Nm) torque.

MAINTENANCE SECTION

Assembly of Reverse Valve, Throttle and Inlet for 1701P

1. Install two Reverse Valve O-rings (3) in the undercut at each end of the reverse valve bushing.

NOTICE

Install the Reverse Valve from left to right while facing the rear of the tool.

2. Insert the Knob Screw (15) through the Reverse Valve Knob (14). Apply Loctite No. 242 to the first two or three threads of the Screw and thread the Screw into the tapped end of the Reverse Valve. While holding the serrated end of the Reverse Valve with pliers, tighten the Screw between 8 and 15 in-lb (.9 and 1.7 Nm) torque.
3. Install a new Throttle Valve Face (4) in the annular groove at the end of the Throttle Valve (3).
4. Install a new Large Bushing O-ring (8) and a new Small Bushing O-ring (9) into their respective grooves of the Throttle Valve Bushing (5). Seat the other new Small Bushing O-ring (17) into the recess of the Motor Housing.
5. Insert the Throttle Valve into the Throttle Valve Bushing, taking care to line up the retaining pin hole in the Throttle Valve with the elongated hole in the Bushing. Drive the Throttle Valve Retaining Pin (7) into the Throttle Valve pin hole.
6. If the Trigger (6) was removed, press it onto the end of the Throttle Valve.
7. Install the Throttle Valve Assembly into the Housing, taking care to line up the cross hole in the Throttle Valve Bushing with the retaining pin hole in the Housing. Drive in the Bushing Retaining Pin (10) from right to left when facing the rear of the tool. Work the Trigger a few times to assure a good sliding fit.
8. If the Exhaust Silencer (23) was removed, install it in the housing handle. Make sure the Silencer is rolled tightly for easy installation.

NOTICE

If you are installing an Exhaust Muffler Kit (19, 20, 21, 22 and 23) for the first time, you must first remove the Exhaust Deflector Retaining Ring (11B), the circular Exhaust Deflector (11A), and the second Exhaust Deflector Retaining Ring.

9. If your tool has a built-in muffler, install the Deflector Gasket (22) and Exhaust Deflector (21).
10. If using Inlet Bushing (2), install the Exhaust Deflector (11A) between the two Exhaust Deflector Retaining Rings (11B). Install the Inlet Bushing (2 or 20). Tighten the Bushing between 20 and 25 ft-lb (27.1 and 33.9 Nm) torque.

11. If the Nameplate (17) has become disfigured, replace it after transferring the proper serial number.

Assembly of the Motor for 1701B

1. Install a new End Plate Gasket (17) into the motor bore of the Motor Housing (1), making sure the holes in the Gasket align with those in the bottom of the Housing.
2. Slide the Rear End Plate (20) onto the short hub of the Rotor (24), with the bearing recess trailing.
3. Slide the Rear Rotor Bearing (19) onto the short hub of the Rotor against the Rear End Plate.
4. Install the Rear Rotor Bearing Retainer (18).
5. With the splined end of the Rotor upright, place the Cylinder (21), pocket end first, over the Rotor with the dowel hole and ports aligned with the holes in the Rear End Plate.
6. Apply a light film of oil to the Vanes (22) and insert them into the vane slots in the Rotor.
7. If the Front Rotor Bearing (25) was removed, press a new Bearing into the recess of the Front End Plate (23).
8. Slide the assembled Front End Plate over the splined hub of the Rotor, Bearing trailing, with the dowel hole and ports of the Front End Plate aligning with like holes in the Cylinder and Rear End Plate.
9. Insert a rod approximately 6" (150 mm) long and 1/8" (3.2 mm) in diameter through the aligned dowel holes in the two End Plates and Cylinder. Use the rod as a guide to insert the motor into the Motor Housing with the dowel hole and ports of the motor and End Plate Gasket aligned.
10. Grasp the Motor Housing in a vise, motor upward. Withdraw the rod and replace it with the Cylinder Dowel (29).

Assembly of the Motor for 1701P

1. Install a new End Plate Gasket (24) into the motor bore of the Motor Housing (1), making sure the holes in the Gasket align with those in the bottom of the Housing.
2. Slide the Rear End Plate onto the short hub of the Rotor (31), with the bearing recess trailing.
3. Slide the Rear Rotor Bearing (26) onto the short hub of the Rotor against the Rear End Plate.
4. Install the Rear Rotor Bearing Retainer (25).
5. With the splined end of the Rotor upright, place the Cylinder (28), pocket end first, over the Rotor with the dowel hole and ports aligned with the holes in the Rear End Plate.
6. Apply a light film of oil to the Vanes (29) and insert them into the vane slots in the Rotor.
7. If the Front Rotor Bearing (32) was removed, press a new Bearing into the recess of the Front End Plate (30).

MAINTENANCE SECTION

8. Slide the assembled Front End Plate over the splined hub of the Rotor, Bearing trailing, with the dowel hole and ports of the Front End Plate aligning with like holes in the Cylinder and Rear End Plate.
9. Insert a rod approximately 6" (150 mm) long and 1/8" (3.2 mm) in diameter through the aligned dowel holes in the two End Plates and Cylinder. Use the rod as a guide to insert the motor into the Motor Housing with the dowel hole and ports of the motor and End Plate Gasket aligned.
10. Grasp the Motor Housing in a vise, motor upward. Withdraw the rod and replace it with the Cylinder Dowel (33).

Assembly of the Impact Mechanism for 1701B

1. Place the Hammer Frame Washer (37) over the splined hub of the Rotor and against the Front Rotor Bearing.
 2. Coat the spline and the pin holes of the Hammer Frame (28) with a light film of Ingersoll-Rand No. 100 Grease.
 3. Install the Hammer Frame on the splined hub of the Rotor.
 4. Coat the Hammer (38) with a light film of Ingersoll-Rand No. 100 Grease, and slide the Hammer into the Hammer Frame.
 5. Coat the two Hammer Pins (30) with a light film of Ingersoll-Rand No. 100 Grease, and insert the Pins in the two pin holes of the Hammer Frame so that they engage the notches in the Hammer.
 6. Coat the front portions of the Anvil (39, 42, 46 or 53) with a light film of Ingersoll-Rand No. 100 Grease. Enter the Anvil into the Front Hammer Frame and through the Hammer until it seats in the Rear Hammer Frame.
 7. If the Hammer Case Bushing (34) was removed, smear a thin film of Ingersoll-Rand No. 100 Grease on the surface of the Bushing and press the Bushing into the Hammer Case (33) from the large open end until the bushing flange contacts the Hammer Case.
 8. Place the Hammer Case Gasket (31) over the front end of the Motor Housing with the holes in the Gasket and Housing aligned.
9. Slide the Hammer Case Assembly over the impact mechanism and install the Hammer Case Cap Screws (32). Tighten the Cap Screws to 45 in-lb (5.09 Nm) torque.

Assembly of the Impact Mechanism for 1701P

1. Place the Hammer Frame Washer (34) over the splined hub of the Rotor and against the Front Rotor Bearing.
2. Coat the spline and the pin holes of the Hammer Frame (36) with a light film of Ingersoll-Rand No. 100 Grease.
3. Install the Hammer Frame on the splined hub of the Rotor.
4. Coat the Hammer (35) with a light film of Ingersoll-Rand No. 100 Grease, and slide the Hammer into the Hammer Frame.
5. Coat the two Hammer Pins (38) with a light film of Ingersoll-Rand No. 100 Grease, and insert the Pins in the two pin holes of the Hammer Frame so that they engage the notches on the Hammer.
6. Coat the front portion of the Anvil (45, 48, 51 or 58) with a light film of Ingersoll-Rand No. 100 Grease. Enter the Anvil into the Front Hammer Frame and through the Hammer until it seats in the Rear Hammer Frame.
7. If the Hammer Case Bushing (42) was removed, smear a thin film of Ingersoll-Rand No. 100 Grease on the surface of the Bushing and press the Bushing into the Hammer Case (41) from the large open end until the bushing flange contacts the Hammer Case.
8. Place the Hammer Case Gasket (39) over the front end of the Motor Housing with the holes in the Gasket and Housing aligned.
9. Slide the Hammer Case Assembly over the impact mechanism and install the Hammer Case Cap Screws (40). Tighten the Cap Screws to 45 in-lb (5.09 Nm) torque.

MAINTENANCE SECTION

TROUBLESHOOTING GUIDE

Trouble	Probable Cause	Solution
Low power	Dirty Air Strainer and/or Exhaust Silencer	Remove the Air Strainer Screen and Exhaust Silencer and clean using a clean, suitable cleaning solution, in a well ventilated area.
	Worn or broken Vanes	Replace complete set of Vanes.
	Worn or broken Cylinder and/or scored End Plates	Examine Cylinder and replace it if it is worn or broken or if bore is scored or wavy. Replace End Plates if they are scored.
	Dirty motor parts	Disassemble tool and clean all parts with a clean, suitable, cleaning solution, in a well-ventilated area. Assemble the tool and inject 3 cc of recommended oil into Inlet and run tool to lubricate internal parts.
	Improper positioning of Reverse Valve	Make certain that Reverse Valve is fully engaged to the left or right.
Motor will not run	Incorrect assembly of motor	Disassemble motor and replace worn or broken parts and reassemble as instructed.
	Insufficient lubricant in the impact mechanism	Remove Hammer Case Assembly and lubricate impact mechanism.
Tool will not impact	Broken or worn impact mechanism parts	Remove Hammer Case and examine impact mechanism parts. Replace any worn or broken parts.
	Impact mechanism not assembled correctly	Refer to Assembly of the Impact Mechanism .

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.