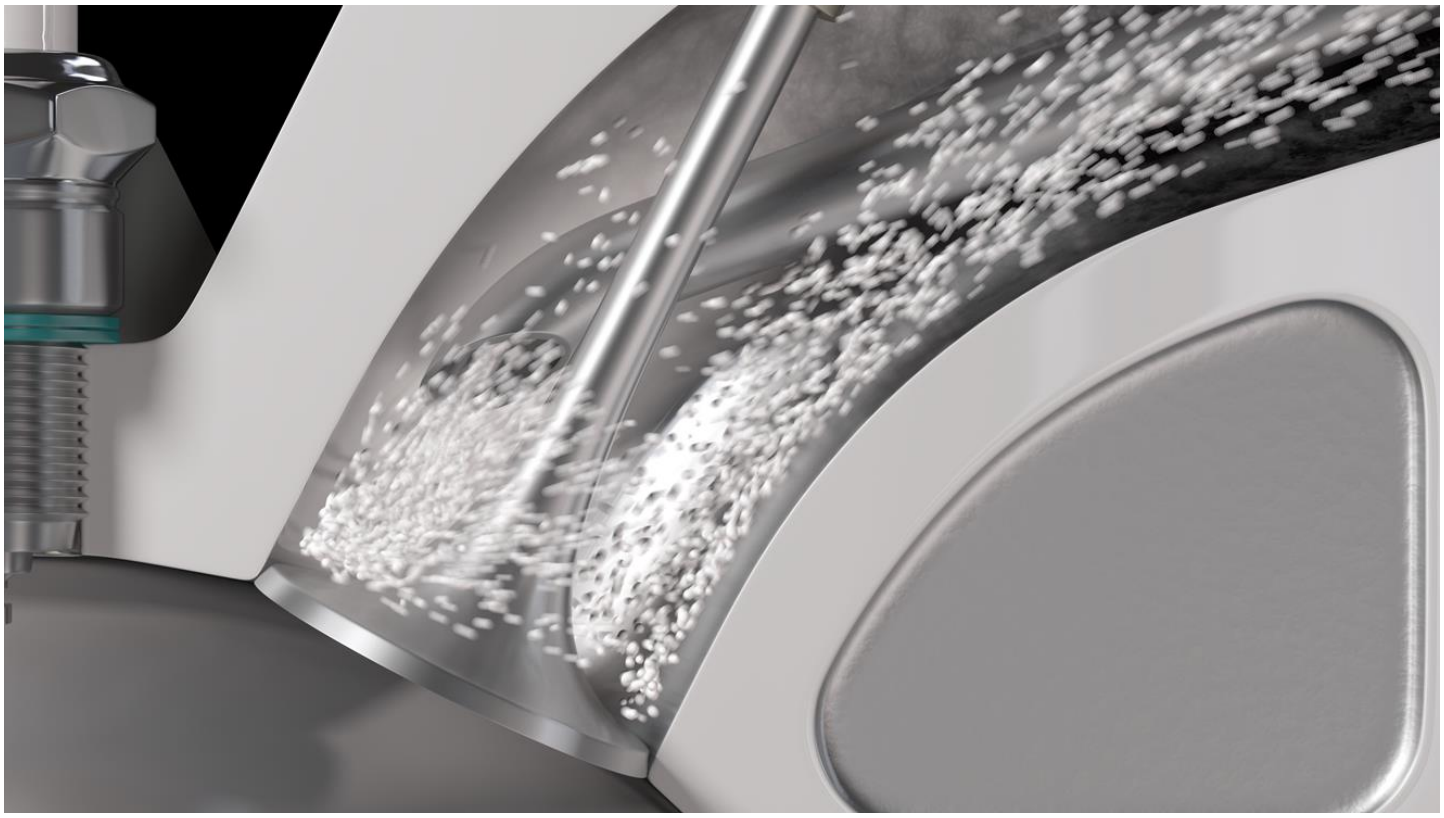
Benutzerhandbuch User Manual





Ventilreinigungssystem
Valve Clean System
Sistema di pulizia delle valvole
Système de nettoyage des soupapes
Klepreinigingssysteem
Venttiilinpuhdistusjärjestelmä
Sistema de limpieza de válvulas
Ventilrengöringssystem
Ventilrensesystem
Sistema de limpeza de válvulas



Inhalt | Content | contenuto | contenu | inhoud | sisältö | contenido | innehåll | indhold | conteúdo

D 4
Einführung 4
Lieferumfang 4
Besondere Sicherheitshinweise 4
Anleitung Reinigungsvorgang 5
GB 6
Introduction 6
Scope of delivery 6
Safety notes 6
Cleaning instructions 7
IT 8
Introduzione 9
Composizione della fornitura 9
Particolari avvertenze di sicurezza 9
Istruzioni per le operazioni di pulizia 11
F 13
Introduction 13
Contenu de la livraison 13
Consignes de sécurité spéciales 13
Instructions de nettoyage 14

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

NL 16
Introductie 16
Leveringsomvang 16
Bijzondere veiligheidsinstructies 16
Handleiding reinigingsproces 18
FI 20
Johdanto 20
Toimitussisältö 20
Turvallisuushuomautuksia 20
Puhdistusohjeet 21
ES 23
Introducción 23
Volumen de suministro 23
Notas de seguridad 23
Instrucciones de limpieza 25
SE 27
Inledning 27
Leveransomfattning 27
Säkerhetsinformation 27
Rengöringsanvisningar 28
DK 28
Indledning 29
Leveringsomfang 29
Særlige sikkerhedshenvisninger 29
Vejledning til renseprocessen 30
PT 32
Introdução 32
Volume de fornecimento 32
Avisos de segurança 32
Instruções de limpeza 33



CAUTION! When cleaning high-voltage vehicles (BEV and hybrid), the following points must be observed: Work on high-voltage vehicles may only be carried out by authorized and trained employees with a certificate of expertise (observe national regulations!).

Before starting work, high-voltage vehicles may be disconnected from the power supply by authorized employees in accordance with the manufacturer's instructions. If this is not observed, there is a risk of serious damage to health and damage to the vehicle!

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

D

Einführung

Wir beglückwünschen Sie zum Erwerb des Ventilreinigungssystems und danken Ihnen für das Vertrauen, das Sie uns damit entgegenbringen. Mit dem Ventilreinigungssystem sind Sie in der Lage modernste Technik mit hoher Kundenzufriedenheit und nachhaltiger Kostenreduzierung zu kombinieren. Um die volle Funktion des Systems nutzen zu können, bitten wir Sie um sorgfältige Beachtung der in dieser Herstellervorschrift zusammengefassten Informationen und Hinweise.

Lieferumfang



(1) Strahlpistole
(2) 360° Schwenkadapter
(3) Adapterschlauch
(4) Druckluftregler
(5) Dosenadapter mit Steigrohr und Ansaugschlauch für Granulat
(6) Strahlrohr 165 mm (gebogen)
(7) Strahlrohr 90 mm (gerade)
(8) Ausblaspistole
(9) Druckluftschlauch
(10) Benutzerhandbuch/Herstellervorschrift
(11) Werkzeugkoffer

- Überprüfen Sie die Lieferung auf Vollständigkeit
- Achten Sie bitte bei der Erstinbetriebnahme auf mögliche Mängel oder Schäden. Sollten derartige Probleme festgestellt werden, nehmen Sie das Gerät nicht in Betrieb und kontaktieren Sie TUNAP.

Besondere Sicherheitshinweise

Bitte lesen Sie sich diese Gebrauchsanweisung vollständig und aufmerksam durch, bevor Sie das Ventilreinigungssystem das erste Mal in Betrieb nehmen. Das Ventilreinigungssystem darf nur von eingewiesenem Personal betrieben werden.

Das Ventilreinigungssystem ist ausschließlich für den professionellen Gebrauch im Kfz-Gewerbe vorgesehen und für folgende Reinigungszwecke freigegeben:

- Reinigung der Ein- und Auslassventile
- Reinigung der Umgebung von Ein- und Auslassventilen bzw. Einlass- und Auslasskanäle

Dieses Gerät ist nur zum Gebrauch mit Ventilreinigungsgranulat freigegeben. Der Gebrauch von anderen Reinigungsmitteln oder Chemikalien kann betriebs- oder sicherheitsrelevante Probleme verursachen. Die folgenden Sicherheitsvorkehrungen müssen eingehalten werden, um eine Beschädigung des Gerätes oder der zu reinigenden Teile sowie schwere Personenschäden zu verhindern:

- Strahlrohr nie auf eigene, fremde Personen oder Tiere richten.
- Beim Strahlen ist den Vorschriften entsprechender Arbeitsschutz zu verwenden. Es empfiehlt sich Schutzbrille und Handschuhen zu verwenden.
- Wartung und Service darf nur vom Hersteller durchgeführt werden.
- Zur Gewährleistung der Sicherheit nur original Ersatzteile (Schläuche, Düsen, Kupplungen) und Zubehör verwenden.

Die anwendbaren Sicherheitsvorschriften, Arbeitsplatzbestimmungen und Arbeitsschutzvorschriften des jeweiligen Landes oder Verwendungsgebietes des Reinigungssystems sind zu beachten und einzuhalten.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Anleitung Reinigungsvorgang



1. Empfindliche Karosserieteile abdecken.
2. Ansaugkrümmer und Anbauteile demontieren.
3. Sämtliche Öffnungen zum Schutz gegen austretendes Reinigungsgranulat verschließen.
4. Druckluftregler (4) an werkstatteigene Druckluftanlage anschließen.
5. Druckluft am Druckluftregler (4) auf 6,5 bar regulieren.
6. Strahlpistole (1) mit Druckluftschlauch (9) am Druckluftregler (4) anschließen.



7. Zu reinigenden Zylinder auf „OT“ (oberer Totpunkt) stellen, damit die Ventile geschlossen sind. **Hinweis: Reinigung nur bei geschlossenen Ventilen durchführen!**
8. Adapterschlauch (3) mit passendem Ende in Ansaugkanal einstecken
9. Werkstattstaubsauger an den Adapterschlauch (3) anschließen.
10. Restliche Ansaugkanäle zum Schutz gegen austretendes Reinigungsgranulat abdecken.





11. Passendes Strahlrohr (6,7) durch den Adapterschlauch (3) in Richtung des zu reinigenden Ventil/Ansaugbereich einbringen.
12. Werkstattstaubsauger einschalten.
13. Verschmutzte Ventile ca. 20-30 Sekunden lang bestrahlen.
14. Reinigungserfolg kontrollieren (ggf. mittels Endoskop), Reinigungsvorgang so oft wiederholen bis ein zufriedenstellendes Reinigungsergebnis erzielt wurde.



15. Ausblaspistole (8) an Druckluftversorgung anschließen.
16. Mit Ausblaspistole (8) restliches Granulat aus dem Ansaug- und Ventilbereich ausblasen.
17. Werkstattstaubsauger ausschalten.





18. Adapterschlauch (3) abnehmen.
19. Etwas Neutralisationslösung in den Ansaug- und Ventilbereich einsprühen um eventuelle Granulatreste aufzulösen. Hinweis: eine Dose Neutralisationslösung ist für 1 Fahrzeug ausreichend.
20. Ansaugkanal mit Lappen abdecken und Neutralisationslösung mit Ausblaspistole (8) ausblasen.

Zur Reinigung weiterer Ventile und Kanäle die Punkte 7 bis 20 erneut an entsprechendem Zylinder durchführen.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

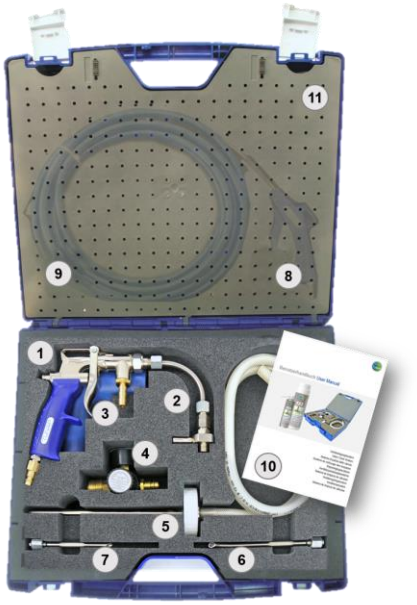
GB

Introduction

Congratulations on your purchase of the valve cleaning system and thank you very much for the trust you have thus put in us. The Valve Clean cleaning system enables you to combine state-of-the-art technology with a high level of customer satisfaction and sustained cost reduction. Please observe the content of this user manual and manufacturer's instructions in order to be able to utilise the full range of functions of the system.

Scope of delivery

(1) Spray gun
(2) 360° swivel adaptor
(3) Adaptor hose
(4) Pressure controller
(5) Container adaptor with uptake and suction hose for granulate
(6) Spray nozzle 165 mm (curved)
(7) Spray nozzle 90 mm (straight)
(8) Blow gun
(9) Compressed air hose
(10) User Manual / Manufacturer's Instructions
(11) Tool case



- Check contents if complete.
- Check for defects and damage before use. Contact TUNAP if you detect any problem. Do not use the device in this event.

Safety notes

Please read the service information / manufacturer's instructions carefully and completly before using the valve cleaning system for the first time. The valve cleaning system may only be used by suitably trained personnel.

The valve cleaning system is solely for professional use in automotive business and released for the following cleaning purposes:

- Cleaning inlet and outlet valves
- Cleaning their surroundings and inlet and outlet ducts

This device is released for use with valve cleaning granulate only. Use with any other product may cause operating and safety problems. The following safety precautions must be applied to prevent damage to the device, parts to be cleaned or persons.

- Never point the device at any person or animal.
- Wear protective clothing when using the device. Protective goggles and gloves are recommended.
- Maintenance and service may only be carried out by the manufacturer.
- For safety reasons only original spare parts (hosing, nozzles, connecting equipment) and accessories may be used.

The safety rules, workplace regulations and occupational safety rules of the country concerned or place where the product is used must be adhered to.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Cleaning instructions



1. Cover delicate bodywork parts.
2. Remove intake manifold and attached parts.
3. Seal all apertures to protect against cleaning granulate that may be discharged.
4. Connect the pressure controller (4) to the garage compressed air system.
5. Adjust the compressed air to 6,5 bar using the pressure controller (4).
6. Connect the spray gun (1) with the compressed air hose (9) to the pressure controller (4).



7. Adjust the cylinder to be cleaned to Top Dead Centre to ensure the valve is closed. **Note. Cleaning may only be carried out with the valves shut**.
8. Insert the adaptor hose (3) with suitable end in the intake duct.
9. Connect the garage vacuum cleaner to the adaptor hosing (3).
10. Cover the remaining intake ducts to protect them against cleansing granulate discharge.





11. Insert suitable spray nozzle (6,7) through the adaptor hose (3) toward the valve / intake area to be cleaned.
12. Turn on the garage vacuum cleaner.
13. Spray dirty valves for about 20 - 30 seconds.



14. Check cleaning (with an endoscope if necessary). Repeat the procedure as often as needed to get a satisfactory result.
15. Connect the blow gun (8) to the compressed air system.
16. Use it to blow residual granulate off the intake and valve areas.
17. Turn the garage vacuum cleaner off.





18. Remover the adaptor hose (3).
19. Spray a little neutralisation solution into/onto the intake and valve areas to dissolve any granulate left. Note that one container of neutralisation solution suffices for 1 vehicle.
20. Cover intake ducting with a cloth and use the blow gun (8) to get rid of the neutralisation solution residue.

Repeat items 7 to 20 above on/in each cylinder to clean further valves and manifolds.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

IT

Introduzione

Congratulazioni per avere acquistato il sistema di pulizia delle valvole. Grazie per la Vostra fiducia riguardo ai nostri prodotti e la nostra impresa. Con il sistema di pulizia delle valvole siete dotati ora della tecnologia più avanzata riflessa in un'elevata soddisfazione da parte degli utenti e combinata con una costante riduzione di costi. Al fine di utilizzare al massimo il sistema e la sua completa funzionalità, vi preghiamo di osservare attentamente le seguenti indicazioni e i consigli forniti del produttore contenuti in questo manuale.

Composizione della fornitura



(1) Pistola a spruzzo
(2) Adattatore orientabile a 360°
(3) Tubo adattatore
(4) Regolatore pressione aria
(5) Adattatore contenitore con tubo di mandata e tubo di aspirazione per granulato
(6) Lancia 165 mm (curva)
(7) Lancia 90 mm (diritta)
(8) Pistola di soffiaggio
(9) Tubo flessibile per l'aria compressa
(10) Manuale utente/indicazioni del costruttore
(11) Valigetta attrezzo

- Vi preghiamo di controllare la completezza della fornitura.
- Vi preghiamo di controllare, inoltre, alla prima messa in funzione l'eventuale presenza di danneggiamenti o difetti. Nel caso vengano riscontrati problemi di questo genere, non mettere in funzione l'attrezzo e contattare TUNAP.

Particolari avvertenze di sicurezza

Vi preghiamo di leggere attentamente e in forma completa queste istruzioni per l'uso prima di mettere in funzione per la prima volta il sistema di pulizia delle valvole. Il sistema di pulizia delle valvole deve essere impiegato e messo in funzione solo da personale con formazione professionale.

Il sistema di pulizia delle valvole a granuli è adatto e previsto esclusivamente per l'impiego professionale presso ditte operanti nel settore degli autoveicoli e per le seguenti operazioni di pulizia:

- Pulizia delle valvole di scarico e di entrata
- Pulizia della zona intorno alle valvole di scarico e d'entrata oppure dei canali di scarico e di entrata

Per quest'attrezzo è previsto e ammesso solo l'impiego di granuli per la pulizia delle valvole. L'impiego di altro materiale pulente o di sostanze chimiche può provocare problemi riguardo alla sicurezza e al funzionamento. Le seguenti disposizioni di sicurezza devono essere osservate al fine di evitare il danneggiamento dell'apparecchio oppure delle parti da pulire, così come provocare danni alle persone:

- Non dirigere mai il getto verso se stessi o altre persone.
- Durante l'impiego e l'applicazione del getto osservare sempre le disposizioni riguardanti la protezione e la sicurezza sul lavoro. Si consiglia l'uso di occhiali e di guanti protettivi.
- Manutenzione e assistenza devono essere eseguiti soltanto dal produttore.
- Impiegare sempre solo ricambi originali (tubi, ugelli, raccordi) e accessori affinché la sicurezza sia garantita.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Le disposizioni relative alla sicurezza, a quelle sul posto di lavoro e alla protezione sul lavoro dei diversi paesi o zone d'impiego del sistema di pulizia, devono essere costantemente e attentamente osservate.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Istruzioni per le operazioni di pulizia



1. Proteggere, coprendole zone particolari della carrozzeria.
2. Smontare il collettore di aspirazione e le parti componenti.
3. Chiudere tutte le aperture in modo da proteggerle dal granulato pulente fuoriuscente.
4. Connettere il regolatore di pressione dell'aria (4) all'impianto dell'aria compressa della propria officina.
5. Regolare l'aria compressa tramite il regolatore (4) sul valore di 6,5 bar.
6. Connettere la pistola a spruzzo (1) con il tubo dell'aria compressa (9) al regolatore dell'aria compressa (4).



7. Posizionare il cilindro da pulire sul PMS (punto morto superiore), affinché le valvole risultino chiuse. **<u>Avvertenza:</u> Effettuare la pulizia solo con le valvole chiuse!**
8. Inserire il tubo adattatore (3) con la parte terminale adatta nel canale di aspirazione.
9. Connettere l'aspiratore per la polvere dell'officina al tubo adattatore (3).
10. Coprire i canali di aspirazione restanti per proteggerli dal granulato pulente in fuoriuscita.





11. Posizionare la lancia adatta (6,7) con il tubo adattatore (3) verso la zona/valvola di aspirazione da pulire.
12. Accendere l'aspiratore dell'officina.
13. Applicare il getto alle valvole sporche per una durata di circa 20-30 secondi.
14. Controllare l'efficacia dell'operazione di pulizia (eventualmente con un attrezzo endoscopico), ripetere il processo pulente finché il risultato non sarà soddisfacente.



15. Connettere la pistola di soffiaggio (8) alla fonte di aria compressa.
16. Soffiare via il granulato restante con la pistola di soffiaggio (8) dalla zona di aspirazione e delle valvole.
17. Spegnere l'aspiratore dell'officina.





18. Sconnettere il tubo adattatore (3).
19. Spruzzare una certa quantità di soluzione neutralizzante nella zona di aspirazione e delle valvole per eliminare eventuali resti di granulato. Avvertenza: una confezione di soluzione neutralizzante è sufficiente per uno veicolo.
20. Coprire il canale di aspirazione con uno straccio e soffiare la soluzione neutralizzante con la pistola di soffiaggio (8).

Per pulire altre valvole e canali dei relativi cilindri, eseguire nuo-

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

vamente le operazioni dal punto 7 fino a 20.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

F

Introduction

Nous vous félicitons pour l'achat du système de nettoyage des soupapes et nous vous remercions de la confiance que vous nous témoignez avec cet achat. Le système de nettoyage des soupapes vous permet de combiner une technologie ultramoderne, un niveau élevé de satisfaction des clients et une réduction durable des coûts. Afin de pouvoir exploiter au maximum la fonctionnalité du système, nous vous prions de tenir compte des informations et consignes figurant dans les présentes prescriptions du fabricant et de les respecter minutieusement.

Contenu de la livraison

(1) Pistolet de projection
(2) Adaptateur articulé 360°
(3) Adaptateur flexible
(4) Régulateur de pression
(5) Adaptateur pour bombes avec tuyau ascendant et tuyau d'aspiration pour granulés
(6) Tube de projection 165 mm (courbé)
(7) Tube de projection 90 mm (droit)
(8) Pistolet à air
(9) Flexible à air comprimé
(10) Mode d'emploi/prescriptions du fabricant
(11) Valise



- Vérifiez si tous les éléments ont bien été livrés.
- Avant la première mise en service, veuillez contrôler que l'appareil ne présente aucun vice ni dommage. Si vous constatez le moindre problème, n'utilisez pas l'appareil et contactez TUNAP.

Consignes de sécurité spéciales

Avant la première mise en service du système de nettoyage des soupapes, veuillez lire le présent mode d'emploi attentivement et dans son intégralité. Le système de nettoyage des soupapes doit être utilisé uniquement par un personnel qualifié ayant reçu les instructions nécessaires.

Le système de nettoyage des soupapes se destine exclusivement à un usage professionnel dans le secteur automobile et est homologué aux fins de nettoyage suivantes :

- Nettoyage des soupapes d'admission et d'échappement
- Nettoyage de l'environnement des soupapes d'admission et d'échappement et des canaux d'admission et d'échappement

Cet appareil est homologué uniquement pour l'utilisation de granulés de nettoyage de soupapes. L'utilisation d'autres produits de nettoyage ou chimiques peut entraîner des dysfonctionnements ou des problèmes relatifs à la sécurité. Respecter impérativement les mesures de sécurité suivantes afin d'éviter tout dommage de l'appareil ou des pièces à nettoyer ainsi que tout dommage corporel grave :

- Ne jamais diriger le tube de projection vers soi-même, d'autres personnes ou des animaux.
- Toujours utiliser des vêtements de protection conformes aux prescriptions pendant la projection. Il est recommandé de porter des lunettes de protection et des gants.
- Les travaux d'entretien et de service doivent être exécutés uniquement par le fabricant.
- Pour garantir une sécurité maximale, utiliser uniquement des pièces de rechange (tuyaux, buses, raccords) et accessoires d'origine.

Tenir compte impérativement des prescriptions de sécurité, dispositions applicables aux lieux de travail et règles de sécurité au travail en vigueur dans le pays ou le domaine d'utilisation respectif du système de nettoyage et les respecter scrupuleusement.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Instructions de nettoyage



1. Recouvrir les pièces sensibles de la carrosserie.
2. Démonter le collecteur d'admission et les pièces rapportées.
3. Obturer toutes les ouvertures afin d'éviter que des granulés de nettoyage ne s'y infiltrent.
4. Raccorder le régulateur de pression (4) au système à air comprimé propre à l'atelier.
5. Régler l'air comprimé sur 6,5 bars à l'aide du régulateur de pression (4).
6. Raccorder le pistolet de projection (1) avec le flexible à air comprimé (9) au régulateur de pression (4).



7. Mettre le cylindre à nettoyer sur le point mort haut (PMH) afin que les soupapes soient fermées. **Remarque : procéder au nettoyage uniquement avec soupapes fermées !**
8. Insérer l'embout correspondant de l'adaptateur flexible (3) dans le canal d'aspiration.
9. Raccorder l'aspirateur d'atelier à l'adaptateur flexible (3).
10. Recouvrir les autres canaux d'aspiration afin d'éviter que des granulés de nettoyage ne s'y infiltrent.





11. Insérer le tube de projection adéquat (6,7) à travers l'adaptateur flexible (3) dans le sens de la soupape/zone d'aspiration à nettoyer.
12. Mettre l'aspirateur d'atelier en marche.
13. Projeter les granulés sur les soupapes sales pendant env. 20-30 secondes.
14. Vérifier si les soupapes sont bien propres (éventuellement au moyen d'un endoscope) et répéter la procédure autant de fois que nécessaire jusqu'à obtenir un résultat de nettoyage satisfaisant.



15. Raccorder le pistolet à air (8) à l'alimentation en air comprimé.
16. À l'aide du pistolet à air (8), souffler les résidus de granulés de la zone d'aspiration et des soupapes.
17. Éteindre l'aspirateur d'atelier.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.





18. Enlever l'adaptateur flexible (3).
19. Vaporiser un peu de solution neutralisante dans la zone d'aspiration et des soupapes pour dissoudre tout reste éventuel de granulés. Remarque : une bombe de solution neutralisante suffit pour 1 véhicule.
20. Recouvrir le canal d'aspiration d'un chiffon et souffler les résidus de solution neutralisante à l'aide du pistolet à air (8).

Pour nettoyer d'autres soupapes et canaux, répéter les étapes 7 à 20 sur le cylindre correspondant.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

NL

Introductie

Gefeliciteerd met uw aankoop van het Klepreinigingssysteem en hartelijk dank voor het hiermee in ons gestelde vertrouwen. Met het Klepreinigingssysteem bent u in staat de modernste techniek te combineren met een hoge klanttevredenheid en duurzame kostenverlaging. Om de functies van het systeem volledig te kunnen benutten, verzoeken wij u de informatie en instructies in dit fabrieksvoorschrift zorgvuldig in acht te nemen.

Leveringsomvang



(1) Straalpistool
(2) 360° draaibare adapter
(3) Adapterslang
(4) Persluchtregelaar
(5) Flesadapter met stijgbuis en aanzuigslang voor granulaat
(6) Straalbuis 140 mm (gebogen)
(7) Straalbuis 90 mm (recht)
(8) Uitblaaspistool
(9) Persluchtslang
(10) Gebruikershandboek/fabrieksvoorschrift
(11) Gereedschapskoffer

- Controleer de levering op volledigheid
- Let bij de eerste ingebruikname op eventuele gebreken of schade. Indien dergelijke problemen worden vastgesteld, mag u het apparaat niet in gebruik nemen en dient u contact op te nemen met TUNAP.

Bijzondere veiligheidsinstructies

Lees deze gebruiksaanwijzing volledig en aandachtig door, voordat u het Klepreinigingssysteem de eerste keer in gebruik neemt. Het Klepreinigingssysteem mag uitsluitend door geïnstrueerd personeel worden bediend.

Het Klepreinigingssysteem is uitsluitend bedoeld voor professioneel gebruik in de auto-industrie en kan daarbij voor de volgende reinigingswerkzaamheden worden ingezet:

- reiniging van de in- en uitlaatkleppen,
- reiniging van de omgeving van de in- en uitlaatkleppen resp. in- en uitlaatkanalen.

Dit apparaat is uitsluitend goedgekeurd voor het gebruik van Kleppenreinigingsgranulaat. Het gebruik van andere reinigingsmiddelen of chemicaliën kan bedrijfs- of veiligheidsrelevante problemen veroorzaken. De volgende veiligheidsmaatregelen moeten worden genomen, om een beschadiging van het apparaat of de te reinigen onderdelen alsmede ernstige personenschade te voorkomen:

- De straalbuis nooit op zichzelf, andere personen of dieren richten.
- Tijdens het stralen dienen de voorgeschreven persoonlijke beschermingsmiddelen te worden gedragen. Het gebruik van een veiligheidsbril en handschoenen is aanbevolen.
- Onderhoud en service mogen uitsluitend door de fabrikant worden uitgevoerd.
- Ter garantie van de veiligheid mogen alleen originele reserveonderdelen (slangen, mondstukken, koppelingen) en toebehoren worden gebruikt.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

De toepasselijke veiligheidsvoorschriften, werkplaatsbepalingen en arbeidsveiligheidsvoorschriften van het betreffende land of gebied waar het reinigingssysteem wordt ingezet, moeten in acht genomen en nageleefd worden.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Handleiding reinigingsproces



1. Kwetsbare carrosserieonderdelen afdekken.
2. Inlaatspruitstukken en aanbouwonderdelen demonteren.
3. Alle openingen afsluiten ter bescherming tegen uitlopend reinigingsgranulaat.
4. De persluchtregelaar (4) op de plaatselijke persluchtinstallatie aansluiting.
5. De perslucht met de persluchtregelaar (4) op 6,5 bar instellen.
6. Het straalpistool (1) met de persluchtslang (9) op de persluchtregelaar (4) aansluiten.



7. De te reinigen cilinders in het BDP (bovenste dode punt) zetten, zodat de kleppen gesloten zijn. **<u>Opmerking:</u> De reiniging alleen bij gesloten kleppen uitvoeren!**
8. De adapterslang (3) met het passende einde in het aanzuigkanaal steken.
9. De werkplaatsstofzuiger op de adapterslang (3) aansluiten.
10. De overige aanzuigkanalen afdekken ter bescherming tegen uitlopend reinigingsgranulaat.





11. De passende straalbuis (6,7) door de adapterslang (3) in de richting van de te reinigen klep of het te reinigen aanzuiggedeelte steken.
12. De werkplaatsstofzuiger inschakelen.
13. De verontreinigde kleppen gedurende ca. 20 - 30 seconden bestralen.
14. Het reinigingsresultaat controleren (evt. met een endoscoop) en de reiniging herhalen tot een bevredigend reinigingsresultaat bereikt is.



15. Het uitblaaspistool (8) op de persluchttoevoer aansluiten.
16. Met het uitblaaspistool (8) het resterende granulaat uit het aanzuig- en klepgedeelte wegblazen.
17. De werkplaatsstofzuiger uitschakelen.





18. De adapterslang (3) afnemen.
19. Wat Neutralisatieoplossing in het aanzuig- en klepgedeelte spuiten, om eventuele granulaatresten op te lossen. Opmerking: Eén bus Neutralisatieoplossing is voldoende voor 1 voertuig.
20. Het aanzuigkanaal met een doek afdekken en de Neutralisatieoplossing met het uitblaaspistool (8) wegblazen.

Voor de reiniging van andere kleppen en kanalen de punten 7 t/m 20 opnieuw uitvoeren bij de betreffende cilinder.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

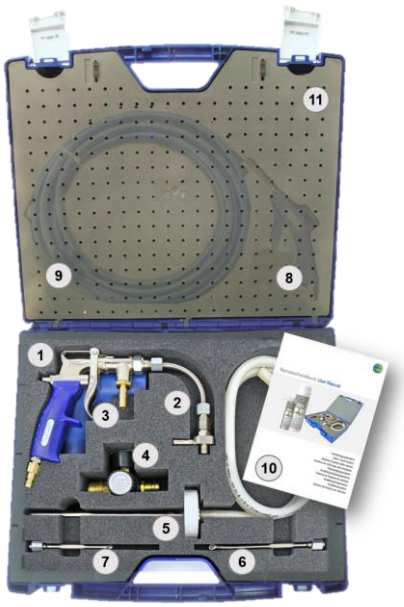
The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

FI

Johdanto

Onnittelut Venttiilinpuhdistusjärjestelmä hankinnan johdosta ja paljon kiitoksia luottamuksesta PSA:iin. Venttiilinpuhdistusjärjestelmä mahdollistaa huipputeknologian yhdistämisen korkean tason asiakastyytyväisyyteen ja pysyvään kustannusten alentamiseen. Huomioi tämän käyttäjän käsikirjan sisältö ja valmistajan ohjeet, jotta pystyt hyödyntämään järjestelmän toiminnot koko laajuudessaan.

Toimitussisältö



(1) Sumutin
(2) 360° kääntyvällä adapterilla
(3) Adapteriletku
(4) Painesäädin
(5) Astia-adapteri nousuputkella ja imuletkulla granulaatille
(6) Sumutussuutin 165 mm (kaartuva)
(7) Sumutussuutin 90 mm (suora)
(8) Puhalluspistooli
(9) Paineilmaletku
(10) Käyttäjän käsikirja / Valmistajan ohjeet
(11) Työkalulaukku

- Tarkista, että sisältö on täydellinen.
- Tarkista ennen käyttöä vikojen ja vaurioiden varalta. Ota yhteys TUNAP:iin, jos havaitset jonkin ongelman. Älä käytä laitetta tässä tapauksessa.

Turvallisuushuomautuksia

Lue huoltotiedot / valmistajan ohjeet huolellisesti ja kokonaan ennen Venttiilinpuhdistusjärjestelmä ensimmäistä käyttökertaa. Venttiilinpuhdistusjärjestelmä saa käyttää vain asianmukaisen koulutuksen saanut henkilöstö.

Venttiilinpuhdistusjärjestelmä on tarkoitettu yksinomaan ammattimaiseen käyttöön autoalan liiketoiminnassa ja seuraaviin puhdistustarkoituksiin:

- Imu- ja pakoventtiilien puhdistaminen
- Venttiilien ympäristön sekä imu- ja pakokanavien puhdistaminen

Tämä laite on tarkoitettu käytettäväksi vain venttiilinpuhdistusgranulaatin kanssa. Käytöstä muiden tuotteiden kanssa voi aiheutua toiminta- ja turvallisuusongelmia. Seuraavia turvallisuustoimenpiteitä tulee noudattaa, jotta estetään laitteelle, puhdistettaville osille tai henkilöille aiheutuvia vahinkoja.

- Älä koskaan osoita laitteella henkilöä tai eläintä.
- Käytä suojavaatetusta laitetta käyttäessäsi. Suosittelemme käyttämään suojalaseja ja käsineitä.
- Kunnossapito- ja huoltotöitä saa tehdä vain valmistaja.
- Turvallisuussyistä tulee käyttää vain alkuperäisiä -varaosia (letkuja, suuttimia ja liitäntälaitteita) ja -tarvikkeita.

Turvallisuusmääräyksiä, työpaikan toimintaohjeita ja kyseisen maan tai tuotteen käyttöpaikan työturvallisuussääntöjä tulee noudattaa.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Puhdistusohjeet



1. Peitä autonkorin herkät osat.
2. Irrota imusarja ja siihen liittyvät osat.
3. Sulje kaikki aukot suojataksesi niitä mahdollisesti vuotavalta puhdistusgranulaatilta.
4. Liitä painesäädin (4) korjaamon paineilmajärjestelmään.
5. Säädä paineilma 6,5 bariin painesäädintä (4) käyttäen.
6. Liitä sumutin (1) paineilmaletkulla (9) painesäätimeen (4).



7. Säädä puhdistettava sylinteri yläkuolokohtaan varmistaaksesi, että venttiili on suljettu. **<u>Huom.</u> Puhdistus voidaan suorittaa vain venttiilit suljettuina**.
8. Liitä adapteriletku (3) imukanavan sopivaan päähän.
9. Liitä korjaamon imuri adapteriletkuun (3).
10. Peitä muut imukanavat suojataksesi niitä vuotavalta puhdistusgranulaatilta.





11. Työnnä sopiva sumutussuutin (6,7) adapteriletkun (3) läpi kohti puhdistettavaa venttiiliä / imualuetta.
12. Käynnistä korjaamon imuri.
13. Sumuta likaisia venttiilejä noin 20 - 30 sekunnin ajan.
14. Tarkista puhdistus (tarvittaessa tähystimellä). Toista toimenpide riittävän monta kertaa saadaksesi haluamasi tuloksen.



15. Liitä puhalluspistooli (8) paineilmajärjestelmään.
16. Puhalla sillä jäljelle jääneet granulaatit pois imu- ja venttiilialueelta.
17. Sammuta korjaamon imuri.





18. Irrota adapteriletku (3).
19. Liuota jäljelle jääneet granulaatit sumuttamalla imu- ja venttiilialueille hiukan –neutralointiliuosta. Huomioi, että yksi purkki –neutralointiliuosta riittää 1 ajoneuvo
20. Peitä imukanavisto liinalla ja poista neutralointiliuoksen jäämät puhalluspistoolin (8) avulla.

Puhdista lisää venttiilejä ja kanavia toistaen edellä mainitut kohdat 7 - 20 kullekin sylinterille.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

ES

Introducción

Lo felicitamos por la compra del sistema de limpieza de válvulas y le agradecemos la confianza que así nos demuestra. El del sistema de limpieza de válvulas le permite combinar lo último en tecnología con un alto nivel de satisfacción del cliente y una reducción sostenible de los costes. Para poder aprovechar toda la gama de funciones del sistema, le pedimos que observe con atención la información y las indicaciones contenidas en este manual.

Volumen de suministro

(1) Pistola rociadora
(2) Adaptador giratorio de 360°
(3) Manguera para adaptador
(4) Regulador de aire
(5) Adaptador para contenedor con tubo montante y manguera de aspiración para granulado
(6) Boquilla rociadora de 165 mm (acodada)
(7) Boquilla rociadora de 90 mm (recta)
(8) Pistola de soplado
(9) Manguera de aire comprimido
(10) Manual de usuario/Instrucciones del fabricante
(11) Caja de herramientas



- Revisar que el contenido esté completo.
- Revisar posibles defectos o daños antes de la primera puesta en marcha. Si se detecta algún problema, no poner en marcha el aparato y ponerse en contacto con TUNAP.

Notas de seguridad

Leer completa y atentamente estas instrucciones antes de poner en marcha el del sistema de limpieza de válvulas por primera vez. El del sistema de limpieza de válvulas solo puede ser utilizado por personal capacitado.

El del sistema de limpieza de válvulas está destinado únicamente al uso profesional en la industria automotriz y está autorizado para los siguientes fines de limpieza:

- Limpieza de válvulas de entrada y de descarga
- Limpieza del entorno de las válvulas y de los canales de entrada y de descarga

Este aparato está autorizado solamente para el uso con granulado para limpieza de válvulas. El uso de otros productos de limpieza o sustancias químicas puede ocasionar problemas de funcionamiento o de seguridad. Deben observarse las siguientes precauciones de seguridad con el fin de evitar dañar el aparato o las piezas por limpiar, así como daños personales graves:

- Nunca apuntar la boquilla rociadora hacia sí mismo, otras personas o animales.
- Cuando se utilice el aparato, usar la protección correspondiente según las instrucciones. Se recomienda usar gafas protectoras y guantes.
- Únicamente el fabricante puede realizar el servicio y los trabajos de mantenimiento.
- Para garantizar la seguridad, solo pueden utilizarse repuestos (mangueras, boquillas, acoplamientos) y accesorios originales.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Deben observarse y respetarse las instrucciones de seguridad, las disposiciones del lugar de trabajo y la legislación en materia de seguridad en el trabajo aplicables en el país correspondiente o en el área de utilización del sistema de limpieza.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Instrucciones de limpieza



1. Cubrir las partes delicadas de la carrocería.
2. Desmontar el colector de admisión y los componentes.
3. Cerrar todas las aperturas para protegerlas de granulado de limpieza que pudiera salir.
4. Conectar el regulador de aire (4) al sistema de aire comprimido del taller.
5. Ajustar el aire comprimido a 6,5 bar en el regulador de aire (4).
6. Conectar la pistola rociadora (1) con la manguera de aire comprimido (6) al regulador de aire (4).



7. Poner el cilindro por limpiar en Punto Muerto Superior para asegurar que las válvulas estén cerradas. **Nota: ¡La limpieza solo puede realizarse con las válvulas cerradas!**
8. Insertar la manguera para adaptador (7) con el extremo adecuado en el canal de aspiración.
9. Conectar la aspiradora del taller a la manguera para adaptador (3).
10. Cubrir los canales de aspiración restantes para protegerlos de granulado de limpieza que pudiera salir.





11. Insertar la boquilla rociadora adecuada (6,7) en la manguera para adaptador (3) en la dirección de la válvula/área de aspiración por limpiar.
12. Poner en marcha la aspiradora del taller.
13. Rociar las válvulas sucias por alrededor de 20-30 segundos.
14. Revisar el resultado de la limpieza (con un endoscopio en caso necesario). Repetir el procedimiento de limpieza tantas veces sean necesarias hasta obtener un resultado de limpieza satisfactorio.



15. Conectar la pistola de soplado (8) al suministro de aire comprimido.
16. Con la pistola de soplado (8) eliminar el granulado restante del área de aspiración y de válvulas.
17. Apagar la aspiradora del taller.





18. Quitar la manguera para adaptador (3).
19. Rociar un poco de solución de neutralización en el área de aspiración y de válvulas para disolver posibles restos de granulado. Nota: un contenedor de solución de neutralización es suficiente para 1 vehículo.
20. Cubrir el canal de aspiración con trapos y eliminar la solución de neutralización restante con la pistola de soplado (8).

Para limpiar más válvulas y canales repetir los puntos 7 a 20 en el cilindro correspondiente.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

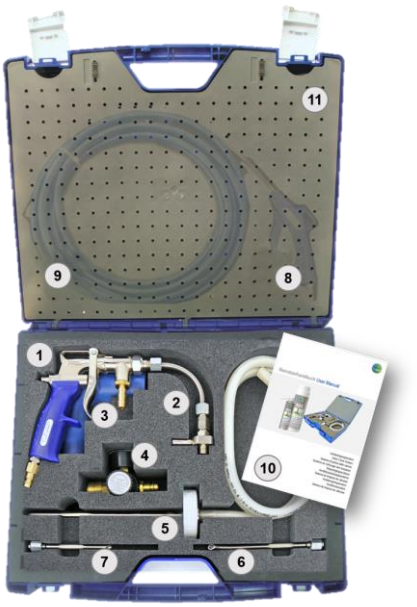
SE

Inledning

Gratulerar till ditt köp ventilrengöringssystemoch tack för ditt förtroende för PSA. Ventilrengöringssystemoch gör det möjligt för dig att kombinera toppmodern teknik med en högre nivå av kundtillfredsställelse och bibehållen kostnadsminskning. Var god observera innehållet i denna bruksanvisning och tillverkarens anvisningar för att kunna utnyttja systemets funktioner till fullo.

Leveransomfattning

(1) Sprejpistol
(2) 360° vridbar adapter
(3) Adapterslang
(4) Tryckkontrolldon
(5) Behållaradapter med intag och sugslang för granulat
(6) Spraymunstycke 165 mm (svängt)
(7) Spraymunstycke 90 mm (rakt)
(8) Blåspistol
(9) Tryckluftsslang
(10) Bruksanvisning/Tillverkarens anvisningar
(11) Verktygslåda



- Kontrollera att innehållet är komplett.
- Kontrollera om det finns defekter eller tecken på skador innan användning. Kontakta TUNAP om du upptäcker några problem. Använd inte enheten i händelse av detta.

Säkerhetsinformation

Var god läs bruksanvisningen/tillverkaranvisningarna noggrant och i sin helhet innan du använder ventilrengöringssystemoch för första gången. ventilrengöringssystemoch får endast användas av lämpligt utbildad personal.

Ventilrengöringssystemoch är endast avsett för professionellt bruk inom bilindustrin och är utvecklat för följande typer av rengöring:

- Rengöring av intags- och utsläppsventiler
- Rengöring av intilliggande områden och intags- och utsläppskanaler

Enheten är utvecklad för användning med enbart ventilrengöringsgranulat . Användning tillsammans med någon annan produkt kan orsaka driftsrelaterade problem eller säkerhetsproblem. Följande säkerhetsåtgärder måste respekteras för att förhindra skador på enheten, delar som ska rengöras eller personer.

- Rikta aldrig enheten mot någon person eller något djur.
- Använd skyddskläder vid användning av enheten. Skyddsglasögon och handskar rekommenderas.
- Underhåll och service får endast utföras av tillverkaren.
- Av säkerhetsskäl får endast originalreservdelar och tillbehör (slangar, munstycken, anslutningsutrustning) användas.

Säkerhetsregler, arbetsplatsregler och arbetarskyddsregler för landet i fråga eller platsen där produkten används måste respekteras.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Rengöringsanvisningar



1. Täck över ömtåliga karossdelar.
2. Avlägsna insugsgrenrör och anslutna delar.
3. Försegla samtliga öppningar för att skydda mot rengöringsgranulat som kan spridas.
4. Anslut tryckkontrolldonet (4) till verkstadens tryckluftssystem.
5. Justera tryckluften till 6,5 bar med hjälp av tryckkontrolldonet (4).
6. Anslut spraypistolen (1) med tryckluftsslangen (9) till tryckkontrolldonet (4).



7. Justera cylindern som ska rengöras till det övre dödläget för att säkerställa att ventilen är stängd. **OBS. Rengöring får endast utföras med ventilerna stängda.**
8. För in adapterslangen (3) med lämplig ände i intagskanalen.
9. Anslut verkstadens dammsugare till adapterslangen (3).
10. Täck över återstående intagskanaler för att skydda dem mot rengöringsgranulat som sprids.





11. För in lämpligt sprejmunstycke (6,7) genom adapterslangen (3) i riktning mot ventilen/insugsområdet som ska rengöras.
12. Starta verkstadens dammsugare.
13. Spreja de smutsiga ventilerna under cirka 20-30 sekunder.
14. Inspektera renhetsgraden (med ett endoskop, vid behov). Upprepa proceduren så många gånger som krävs för att uppnå tillfredsställande resultat.



15. Anslut blåspistolen (8) till tryckluftssystemet.
16. Använd pistolen för att blåsa bort granulatrester från intaget och ventilområdet.
17. Stäng av verkstadens dammsugare.





18. Avlägsna adapterslangen (3).
19. Spreja lite neutraliserande lösning i/på intaget och ventilområdet för att lösa upp eventuella återstående granulatrester. Observera att en behållare neutraliserande lösning räcker till 1 fordon.
20. Täck över intagskanalerna med en trasa och använd blåspistolen (8) för att avlägsna resterna av den neutraliserande lösningen.

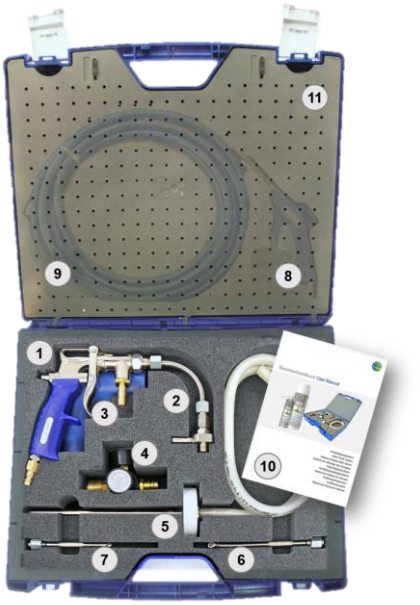
Upprepa punkt 7 till 20 ovan på/i varje cylinder för att rengöra ventiler och grenrör ytterligare.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

DK

Indledning
Tillykke med dit køb af et ventilrensesystemog tak for den udviste tillid. Med ventilrensesystemog er du i stand til at kombinere moderne teknik med stor kundetilfreds og vedvarende omkostningsreduktion. For at kunne udnytte systemets fulde funktion, skal du overholde de i disse producentanvisninger sammenfattede informationer og henvisninger meget nøje.

Leveringsomfang
(1) Blæsepistol
(2) 360° svingadapter
(3) Slangeadapter
(4) Trykluftregulator
(5) Dåseadapter med stigerør og indsugningsslange til granulat
(6) Blæserør 165 mm (bøjet)
(7) Blæserør 90 mm (lige)
(8) Udblæsningspistol
(9) Trykluftslange
(10) Brugervejledning/Producentanvisninger
(11) Værktøjskuffert



- Kontrollér om leveringen er fuldstændig
- Vær ved den første ibrugtagning opmærksom på eventuelle defekter eller skader. Konstateres der sådanne problemer, må du ikke tage apparatet i brug, men kontakt i stedet TUNAP.

Særlige sikkerhedshenvisninger
Læs denne brugsanvisning fuldstændigt og grundigt igennem, inden du tager ventilrensesystemog i brug for første gang. Ventilrensesystemog må kun bruges af undervist personale.

Ventilrensesystemog er udelukkende beregnet til professionel brug i bilbranchen og er godkendt til følgende renseformål:
- Rensning af indsugnings- og udstødningsventiler
- Rensning omkring indsugnings- og udstødningsventiler hhv. indsugnings- og udstødningskanaler

Dette apparat er kun godkendt til brug af ventilrensegranulat. Brug af andre rensemidler eller kemikalier kan forårsage drifts- eller sikkerhedsrelevante problemer. De følgende sikkerhedsforanstaltninger skal overholdes for at forhindre beskadigelse af apparatet eller de dele, der skal renses samt alvorlige personskader:
- Ret aldrig blæserøret mod dig selv, fremmede mennesker eller dyr.
- Under brugen skal der bruges tilsvarende sikkerhedsudstyr. Det anbefales at bruge beskyttelsesbrille og handsker.
- Vedligeholdelse og service må kun udføres af producenten.
- For en sikkerhed skyld må der kun bruges originale reservedele (slanger, dyser, koblinger) og tilbehør.

De anvendelige sikkerhedsforskrifter, arbejdspladsbestemmelser og arbejderbeskyttelsesforskrifter i det pågældende land eller anvendelsesområde skal overholdes.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Vejledning til renseprocessen



1. Tildæk følsomme karosseridele.
2. Afmonter indsugningsmanifold og monteringsdele.
3. Luk alle åbninger for at beskytte mod udløbende rensegranulat.
4. Tilslut trykluftregulatoren (4) til værkstedets trykluftsystem.
5. Indstil trykluften på 6,5 bar på trykluftregulatoren (4).
6. Tilslut blæsepistolen (1) med trykluftslangen (6) på trykluftregulatoren (4).



7. Stil cylinderen, der skal renses på „ØD“ (øverste dødpunkt), så ventilerne er lukkede. **Henvisning: Gennemfør kun rensningen med lukkede ventiler!**
8. Stik adapterslangen (7) med den passende ende ind i indsugningskanalen
9. Tilslut værkstedsstøvsugeren til adapterslangen (3).
10. Tildæk de andre indsugningskanaler for at beskytte mod udløbende rensegranulat.





11. Stik det passende blæserør (6,7) igennem adapterslangen (3) i retning af den/det ventil/indsugningsområde, der skal renses.
12. Tænd værkstedsstøvsugeren.
13. Rens de snavsede ventiler ca. 20-30 sekunder.
14. Kontrollér resultatet (evt. med et endoskop), gentag rensningen indtil der opnås et tilfredsstillende resultat.



15. Tilslut udblæsningspistolen (8) til trykluftforsyningen.
16. Blæs med det resterende granulat ud af indsugnings- og ventilområdet med udblæsningspistolen (4).
17. Sluk værkstedsstøvsugeren.





18. Fjern adapterslangen (3).
19. Sprøjt lidt neutraliseringsopløsning ind i indsugnings- og ventilområdet for at opløse eventuelle granulatrester. Henvisning: En dåse neutraliseringsopløsning rækker til 1 køretøj.
20. Tildæk indsugningskanalen med en klud og blæs neutraliseringsopløsningen ud med udblæsningspistolen (8).

Til rensning af andre ventiler og kanaler udføres punkt 7 til 20 igen på den tilsvarende cylinder.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

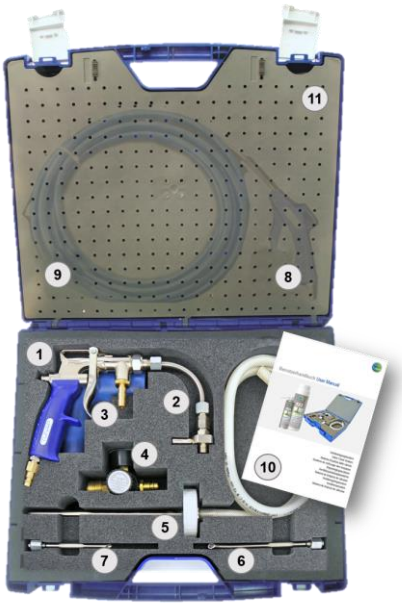
PT

Introdução

Parabéns pela compra do sistema de limpeza de válvulas e obrigado pela confiança que depositou na PSA. O sistema de limpeza de válvulas possibilita-lhe a combinação da mais moderna tecnologia com um enorme nível de satisfação dos clientes, bem como uma redução contínua de custos. Para poder utilizar toda a gama de funções do sistema, consulte o conteúdo deste manual de usuário e instruções do fabricante.

Volume de fornecimento

(1) Pistola de jato
(2) Adaptador de giro 360º
(3) Adaptador de mangueira
(4) Regulador de ar comprimido
(5) Adaptador de recipiente com mangueira de absorção e sucção para granulados
(6) Bocal difusor 165 mm (curvo)
(7) Bocal difusor 90 mm (reto)
(8) Pistola de ar comprimido
(9) Mangueira de ar comprimido
(10) Manual de usuário / Instruções do fabricante
(11) Caixa de ferramentas



- Verifique se o conteúdo está completo.
- Antes de usar, verifique se há defeitos ou imperfeições. Se detectar algum problema, não coloque o aparelho em funcionamento e contacte TUNAP.

Avisos de segurança

Leia a informação do serviço / instruções do fabricante cuidadosamente e na totalidade antes de usar sistema de limpeza de válvulas pela primeira vez. O sistema de limpeza de válvulas só pode ser usado por pessoal devidamente treinado.

O sistema de limpeza de válvulas é exclusivo de uso profissional no negócio de automóveis e previsto para os seguintes propósitos de limpeza:

- Limpeza de válvula de entra e de saída
- Limpeza dos arredores e tubos de entrada e saída

Este aparelho só está liberado para uso com granulado limpador de válvula. A utilização com outros produtos de limpeza ou químicos pode causar problemas de uso e segurança. As seguintes medidas de segurança devem ser aplicadas para prevenir danos no aparelho, partes a ser limpas ou pessoas:

- Nunca aponte o aparelho para pessoas ou animais.
- Use roupa protetora quando estiver a usar o aparelho. Recomendamos o uso de óculos e luvas de proteção.
- A manutenção e o serviço só podem ser efetuados pelo fabricante.
- Por razões de segurança, só podem ser usados peças e acessórios originais (mangueiras, bocais, equipamentos conectores).

Devem ser cumpridas as regras de segurança, normas de local de trabalho e regras de segurança ocupacional do país em questão ou lugar onde o produto é usado.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Instruções de limpeza



1. Cubra as partes delicadas da carroçaria.
2. Remova o coletor de entrada e as partes anexas.
3. Sele todas as aberturas para proteger contra o granulado de limpeza que pode ser descarregado.
4. Ligue o controlador de pressão (4) ao sistema de ar comprimido da garagem.
5. Ajuste o compressor de ar para 6,5 bar usando o controlador de pressão (4).
6. Ligue a pistola (1) com a mangueira de ar comprimido (6) ao controlador de pressão (4).



7. Ajuste o cilindro a ser limpo em ponto morto superior, para garantir que a válvula esteja fechada. **Nota: A limpeza só pode ser executada com as válvulas fechadas.**
8. Ligue a mangueira do adaptador (7) com a ponta adequada no tubo de entrada.
9. Ligue o aspirador da garagem à mangueira do adaptador (3).
10. Cubra os tubos de entrada, para os proteger contra a descarga de limpeza de granulado.





11. Introduza o bocal difusor adequado (6,7) através da mangueira do adaptador (3) na direção da área da válvula / entrada a ser limpa.
12. Ligue o aspirador da garagem.
13. Pulverize as válvulas sujas durante aproximadamente 20-30 segundos.
14. Verifique a limpeza (com um endoscópio se for necessário). Repita o procedimento quantas vezes for necessário para obter um resultado satisfatório.



15. Ligue a pistola de ar comprimido (8) ao sistema de ar comprimido.
16. Use-o para soprar granulado residual das áreas de entrada e da válvula.
17. Desligue o aspirador da garagem





18. . Remova o adaptador de mangueira (3).
19. Pulverize um pouco de solução neutralizadora dentro/sobre as áreas de entrada e válvula para dissolver qualquer granulado restante. Nota: o recipiente da solução neutralizadora é suficiente para 1 veículo.
20. Cubra os tubos de entrada com um pano e use a pistola de ar comprimido (8) para eliminar o resíduo de solução neutralizadora.

Repita os passos 7 a 20 acima em cada cilindro, para limpar as próximas válvulas e coletores.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

Die in dieser Information gemachten Angaben sind das Ergebnis sorgfältiger Untersuchungen. Soweit sie sich auf die Anwendung beziehen, sind sie als Empfehlung zu betrachten, die dem Erfahrungsstand entsprechen. Wegen der Vielseitigkeit der Anwendungs- u. Arbeitsweisen können wir jedoch eine Verbindlichkeit nicht übernehmen. Es wird daher ein vertragliches Rechtsverhältnis nicht begründet und es entstehen aus eventuellen Kaufverträgen keine Nebenverpflichtungen. Diese Information ist nur in ihrer jeweils aktuellsten Fassung gültig.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity
TUNAP GmbH & Co. KG | D-82515 Wolfratshausen | Tel. 08171 / 16 00 – 0 | info@tunap.com | www.tunap.com
TUNAP.COM

The specifications provided in this Service Information sheet are the results of careful analysis. Any application-related specifications shall be viewed as recommendations based on past experiences. Due to the wide variety of applications and work methods, we are unable to provide binding specifications. Therefore, there exists no contractual legal relationship, nor will secondary obligations arise from any purchase contracts. Only the most recent version of the Service Information sheet retains its validity.
TUNAP GmbH & Co. KG | D-82515 Wolfratshausen | Tel. 08171 / 16 00 – 0 | info@tunap.com | www.tunap.com
TUNAP.COM