

Air powered series

## 600A – NE76, S200 w/original Vyon F candle filters installed

42160081



### Original instruction manual

INSTRUCTION MANUAL EN

### Translation of original instruction manual

ANVÄNDARMANUAL SE

ASENNUS JA KÄYTTÖOHJE FI

BEDIENUNGSANLEITUNG DE

BETJENINGSVEJLEDNING DK

BRUKSANVISNING NO

GEBRUIKSAANWIJZING NL

INSTRUCTION MANUAL HU

INSTRUKCJA OBSŁUGI PL

ISTRUZIONE PER L'USO ES

MANUAL DE UTILIZARE RO

MANUALE DI ISTRUZIONE IT

MANUEL D'INSTRUCTION FR

NÁVOD K OBSLUZE CZ

ИНСТРУКЦИЯ ПО

ЭКСПЛУАТАЦИИ RU

# Declaration of conformity

## EN English

### Declaration of conformity

We, AB Ph. Nederman & Co., declare under our sole responsibility that the Nederman product:

A units: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A and 722A with accessories to which this declaration relates, are in conformity with the following:

#### Directives

2006/42/EC, 87/404/EEC.

#### Standards

EN 286-1, EN ISO 12100-1 and EN ISO 12100-2.

## DA Dansk

### Overensstemmelseserklæring

Vi, AB Ph. Nederman & Co. erklærer som eneansvarlige, at produkterne fra Nederman:

A-enhederne: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A og 722A og tilbehør dertil, som denne erklæring vedrører, er i overensstemmelse med bestemmelserne i følgende direktiver og standarder:

#### Direktiver

2006/42/EC, 87/404/EEC.

#### Standarder

EN 286-1, EN ISO 12100-1 og EN ISO 12100-2.

## ES Español

### Declaración de Conformidad

Nosotros, AB Ph. Nederman & Co., declaramos bajo nuestra única responsabilidad que el producto Nederman:

Unidades A: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A y 722A con accesorios, a los que se refiere esta declaración, cumplen con las disposiciones de las siguientes:

#### Directivas

2006/42/EC, 87/404/EEC.

#### Normas

EN 286-1, EN ISO 12100-1 y EN ISO 12100-2.

## FR Français

### Déclaration de conformité

Nous, AB Ph. Nederman & Co., déclarons sous notre seule responsabilité, que les produits Nederman :

Unités A: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A et 722A et accessoires auxquels cette déclaration s'applique, sont conformes aux directives et normes suivantes :

#### Directives

2006/42/EC, 87/404/EEC.

#### Normes

EN 286-1, EN ISO 12100-1 et EN ISO 12100-2.

## CS Český

### Prohlášení o shodě

My, společnost AB Ph. Společnost Nederman & Co. prohlašuje na svou zodpovědnost, že výrobek Nederman:

jednotky A: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A a 722A s příslušenstvími, kterých se toto prohlášení týká, jsou v souladu s těmito předpisy:

#### Směrnice

2006/42/EC, 87/404/EEC.

#### Normy

EN 286-1, EN ISO 12100-1 a EN ISO 12100-2.

## DE Deutch

### Konformitätserklärung

Wir, AB Ph. Nederman & Co., erklären in alleiniger Verantwortung, dass das Nederman Produkt:

A-Einheiten: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A und 722A5 mit dem Zubehör, auf das sich diese Erklärung bezieht, den folgenden Normen entspricht:

#### Richtlinien

2006/42/EC, 87/404/EEC.

#### Standards

EN 286-1, EN ISO 12100-1 und EN ISO 12100-2.

## FI Suomi

### Vaatimustenmukaisuusvakuutus

Me, AB Ph. Nederman & Co., vakuutamme yksinomaan omalla vastuullamme, että Nederman-tuote

A-yksiköt: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A ja 722A sekä niiden lisävarusteet, joihin tämä vakuutus liittyy, täyttävät seuraavat vaatimukset:

#### Direktiivit

2006/42/EC, 87/404/EEC.

#### Standardit

EN 286-1, EN ISO 12100-1 ja EN ISO 12100-2.

## HU Magyar

### Megfelelőségi Nyilatkozat

Mi, az AB Ph. Nederman & Co. nevében, felelősségünk tudatában kijelentjük hogy a(z)

A egységek: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A és 722A, valamint azon kellekek, amelyekre ez a nyilatkozat vonatkozik, megfelelnek az alábbiaknak:

#### Direktíváknak

2006/42/EC, 87/404/EEC.

#### Szabványoknak

EN 286-1, EN ISO 12100-1 és EN ISO 12100-2.

AB Ph. Nederman & Co.  
P.O. Box 602  
SE-251 06 Helsingborg  
Sweden

Erik Blix  
Plant Manager



## IT Italiano

### Dichiarazione di conformità

Noi, AB Ph. Nederman & Co., dichiariamo sotto la nostra esclusiva responsabilità che il prodotto Nederman:

Unità A: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A e 722A e relativi accessori, oggetto di questa dichiarazione, sono conformi alle seguenti:

#### Direttive

2006/42/EC, 87/404/EEC.

#### Norme

EN 286-1, EN ISO 12100-1 ed EN ISO 12100-2.

## NO Norsk

### Samsvarserklæring

Vi, AB Ph. Nederman & Co, erklærer på eget ansvar at Nederman produkt:

A-enhetene: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A og 722A med tilbehør som denne erklæringen gjelder for, er i overensstemmelse med følgende:

#### Direktiver

2006/42/EC, 87/404/EEC.

#### Standarder

EN 286-1, EN ISO 12100-1 og EN ISO 12100-2.

## RO Română

### Declarație de conformitate

Firma AB Ph. Nederman & Co. declară pe proprie răspundere că produsele Nederman:

unitățile A: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A și 722A cu accesoriile la care se referă prezenta declarație respectă:

#### Directivele

2006/42/EC, 87/404/EEC.

#### Standardele

EN 286-1, EN ISO 12100-1 și EN ISO 12100-2.

## SV Svenska

### Försäkran om överensstämmelse

Vi, AB Ph. Nederman & Co. försäkrar under eget ansvar att Nederman-produkten:

A-enheter: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A och 722A med tillbehör som omfattas av denna försäkran är i överensstämmelse med följande:

#### Direktiv

2006/42/EC, 87/404/EEC.

#### Standarder

EN 286-1, EN ISO 12100-1 och EN ISO 12100-2.

## NL Nederlands

### Conformiteitsverklaring

Wij, AB Ph. Nederman & Co, verklaren in uitsluitende aansprakelijkheid dat het product van Nederman:

A-eenheden: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A en 722A met toebehoren waarop deze verklaring van toepassing is, in overeenstemming zijn met de volgende:

#### Richtlijnen

2006/42/EC, 87/404/EEC.

#### Normen

EN 286-1, EN ISO 12100-1 en EN ISO 12100-2.

## PL Polski

### Deklaracja zgodności

My, AB Ph. Nederman & Co., niniejszym oświadczamy na naszą własną odpowiedzialność, że produkty:

jednostki A: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A i 722A wraz z akcesoriami, których dotyczy niniejsza deklaracja, są zgodne z następującymi:

#### Dyrektywy

2006/42/EC, 87/404/EEC.

#### Normy

EN 286-1, EN ISO 12100-1 i EN ISO 12100-2.

## RU Русский

### Заявление о соответствии

Мы, AB Ph. Nederman & Co., заявляем об исключительной ответственности, что оборудование Nederman:

Устройства А: 014A, 105A, 106A, 112A, 113A, 115A, 116A, 117A, 139A, 206A, 216A, 218A, 221A, 305A, 306A, 315A, 316A, 405A, 415A, 425A, 426A, 450A, 460A, 470A, 471A, 500A, 510A, 570A, 580A, 581A, 600A, 700A, 710A, 720A, 721A и 722A с дополнительным оборудованием, к которому относится эта декларация, соответствует следующим требованиям:

#### Директивы

2006/42/EC, 87/404/EEC.

#### Стандарты







EN 286-1, EN ISO 12100-1 и EN ISO 12100-2.

## Warning

EN		<b>WARNING! Explosion risk.</b> If this unit shall be used for collection of hazardous, explosive or high flammable material, or in areas where such is present, contact your nearest authorized distributor or Nederman for technical advice!
SV		<b>VARNING! Explosionsrisk.</b> Om denna enhet skall användas för uppsugning av hälsovådligt, explosivt eller lättantändligt material - eller i utrymmen där sådant förekommer - kontakta närmaste auktoriserade distributör eller Nederman för teknisk rådgivning!
FI		<b>VAROITUS! Räjähdyksvaara.</b> Mikäli tätä yksikköä käytetään vaarallisten, räjähtävien tai helposti syttyvien materiaalien keräämiseen tai alueilla, joilla tällaisia materiaaleja esiintyy, teknisiä ohjeita on pyydetävä Nedermanin paikalliselta edustajalta!
DE		<b>WARNUNG! Explosionsgefahr.</b> Wenn diese Einheit zur Aufnahme gefährlicher, explosiver oder hochentzündlicher Materialien verwendet bzw. in Bereichen eingesetzt werden soll, in denen diese Materialien vorkommen, wenden Sie sich an einen autorisierten Vertriebspartner in Ihrer Nähe oder an Nederman, um technische Hilfestellung zu erhalten.
DA		<b>ADVARSEL! Eksplosionsfare.</b> Hvis denne enhed skal anvendes til opsugning af farligt, eksplosivt eller meget brandfarligt materiale, eller på steder, hvor sådant materiale forekommer, skal du kontakte din nærmeste autoriserede distributør eller Nederman for at få teknisk rådgivning!
NO		<b>ADVARSEL! Eksplosjonsfare.</b> Hvis denne enheten skal brukes til oppsamling av helsefarlige, eksplosive eller lett antennelige materialer, eller i områder der dette forekommer, må du ta kontakt med din nærmeste autoriserte distributør eller Nederman for teknisk veiledning!
NL		<b>WAARSCHUWING! Explosiegevaar.</b> Indien deze unit zal worden gebruikt voor het afzuigen van gevaarlijk, explosief of sterk brandbaar materiaal of in een omgeving waar explosie- of brandgevaar bestaat, neem dan contact op met uw dichtstbijzijnde erkende distributeur of Nederman voor technisch advies!
HU		<b>FIGYELMEZTETÉS! Robbanásveszély.</b> Ha a berendezést veszélyes, robbanásveszélyes vagy gyúlékony anyagok begyűjtésére használja, illetve olyan területeken használja, ahol ilyen anyagok előfordulnak, akkor műszaki tanácsadásért forduljon a Nederman legközelebbi hivatalos képviselőjéhez.
PL		<b>OSTRZEŻENIE! Zagrożenie wybuchem.</b> Jeśli niniejsza jednostka będzie używana do gromadzenia niebezpiecznego, wybuchowego lub wysoce łatwopalnego materiału, czy też w obszarach, w których taki materiał jest obecny, wówczas, aby uzyskać poradę techniczną, skontaktuj się z najbliższym autoryzowanym dystrybutorem lub firmą Nederman!

ES		<b>ADVERTENCIA: riesgo de explosión.</b> Si pretende utilizar esta unidad para la recoger materiales peligrosos, explosivos o altamente inflamables, o en zonas donde puedan estar presentes, póngase en contacto con su distribuidor autorizado o pida consejo a los técnicos de Nederman.
RO		<b>AVERTIZARE! Pericol de explozie.</b> Dacă acest produs urmează să fie utilizată pentru colectarea unor materiale periculoase, explozive sau inflamabile, ori în zone în care sunt prezente asemenea substanțe, luați legătura cu cel mai apropiat distribuitor autorizat sau cu Nederman pentru indicații tehnice!
IT		<b>AVVERTENZA! Rischio di esplosione.</b> Per l'eventuale utilizzo dell'unità per la raccolta di materiale pericoloso, esplosivo o altamente infiammabile, oppure in presenza di materiale di questo tipo, contattare il distributore autorizzato più vicino o Nederman per un parere tecnico!
FR		<b>AVERTISSEMENT ! Risque d'explosion.</b> Si cet appareil doit être utilisé pour la collecte de matériaux dangereux, explosifs ou très inflammables ou dans les zones où ce type de matériaux est présent, contactez votre distributeur ou Nederman pour des conseils techniques !
CS		<b>VÝSTRAHA! Nebezpečí výbuchu.</b> Bude-li tato jednotka použita ke shromažďování nebezpečného, výbušného nebo hořlavého materiálu nebo v prostorách, kde je takový materiál přítomen, vyžádejte si technickou poradu u nejbližšího oprávněného distributora nebo u společnosti Nederman.
RU		<b>ВНИМАНИЕ! Опасность взрыва.</b> Если данное устройство будет использоваться для сбора опасных, взрывоопасных или легковоспламеняющихся материалов или в зонах, где присутствуют такие материалы, пожалуйста, обратитесь к ближайшему авторизованному дистрибьютору или в компанию Nederman для получения технических рекомендаций!

## Warnings and prohibitions

	 Max 8 bar	 230VAC				
<b>EN</b>	Compressed air, max 8 bar	Alternating current	Moving pneumatic cylinder	Unstable	Noise	Crush risk
<b>SV</b>	Tryckluft, max 8 ba	Växelström	Rörlig luftcylinder	Instabil	Oljud	Klämrisk
<b>FI</b>	Paineilma, maks. 8 bar	Vaihtovirta	Liikkuva paineilmasylinteri	Epävakaa	Melua	Puristumisvaara
<b>DE</b>	Druckluft, max. 8 Bar	Wechselstrom	Beweglicher Druckluftzylinder	Instabil	Geräusch	Klemmgefahr
<b>DA</b>	Trykluft, maks. 8 bar	Vekselstrøm	Bevægelig trykluftscylinder	Ustabil	Støj	Klemfare
<b>NO</b>	Trykkluft, maks. 8 bar	Vekselstrøm	Bevegelig pneumatisk sylinder	Ustabil	Støy	Klemfare
<b>NL</b>	Perslucht, max. 8 bar	Wisselstroom	Bewegende pneumatische cilinder	Onstabiel	Geluid	Beknellingsgevaar
<b>HU</b>	Sűrített levegő, max. 8 bar	Váltóáram	Mozgó pneumatikus munkahenger	Ingatag	Zaj	Becsípődés veszélye
<b>PL</b>	Powietrze sprężone, maks. 8 bar	Prąd zmienny	Przesuwający się siłownik pneumatyczny	Niestabilność	Hałas	Niebezpieczeństwo wciągnięcia
<b>ES</b>	Aire comprimido, máx. 8 bar	Corriente alterna	Cilindro neumático en movimiento	Inestable	Ruido	Riesgo de pellizcamiento
<b>RO</b>	Aer comprimat, maximum 8 bari	Curent alternativ	Cilindru pneumatic mobil	Instabil	Zgomot	Risc de prindere
<b>IT</b>	Aria compressa, max 8 bar	Corrente alternata	Cilindro pneumatico in movimento	Instabile	Rumore	Rischio di schiacciamento
<b>FR</b>	Air comprimé, max. 8 bars	Courant alternatif	Vérin pneumatique mobile	Instable	Bruit	Risque de pincement
<b>CS</b>	Stlačený vzduch, max. 8 barů	Střídavý proud	Pohybující se pneumatický válec	Nestabilní	Hluk	Nebezpečí přimáčknutí
<b>RU</b>	Сжатый воздух, макс. 8 бар	Переменный ток	Движущийся пневматический цилиндр	Неустойчивое положение	Шум	Опасность защемления



## **Safety**

Study this manual carefully before using the vacuum cleaner for the first time.

Only properly trained personnel are allowed to use this product.

Only connect a vacuum cleaner with a 1-phase motor to an earthed power socket that has the same voltage as that listed on the vacuum cleaner's nameplate.

Do not use the vacuum cleaner to collect material that is hot, explosive, highly flammable, chemically unstable, spontaneously ignitable, or which can release sparks. The vacuum cleaner must be ATEX approved for the appropriate zone if it is located near this type of material.

Always disable the control system before disconnecting power to the vacuum cleaner.

Completely disconnect the vacuum cleaner from all power sources before any type of service or transportation.

Disconnect the vacuum cleaner with a 1-phase motor before removing its motor assembly.

Only authorised personnel are allowed to carry out electrical installation.

Replace all damaged components from a vacuum overpressure with original spare parts.

Do not remove the cover of the vacuum clean once it is started.

Do not put the vacuum hose inlet near a person's head.

Wear an approved breathing mask, and be careful not to spread dust when changing filters. Empty the dust into a container or plastic bag.

Do not use the vacuum cleaner if there is restricted or no airflow. The fan motor can become overheated.

Turn off the vacuum cleaner if liquid or foam escapes from it.

Store the vacuum cleaner in standing position.

Get appropriate medical care immediately if there is a personal injury.

## Operating instructions

Generally, all the vacuum cleaners are delivered for use with dry material. For use with wet material, vacuum cleaners are delivered with a filter basket and float ball. For more information, please contact the distributor or manufacturer.

### **Bulk-bags**

Certain Ex products should be equipped with conductive bulk-bags for collecting material. Other collection methods may be used if the system risk analysis finds them to be safe.

### **Vacuum cleaner use, dry material:**

1. Connect power supply.
2. Turn on switch to start the vacuum cleaner.
3. When the filter is clogged, the suction power is reduced.
4. Switch off the vacuum cleaner before filter cleaning and emptying the container.
  - a. Clean the cartridge filter by tapping it slightly on the floor.
  - b. Shake or wash the filter bag.
  - c. Replace the dust bag.

**NOTE!** Ab/Bb 216, 221, and 426 have an outside cleaning handle. See the filter cleaning section.

### **Vacuum cleaner use, wet material:**

1. Connect power supply.
2. Turn on switch to start the vacuum cleaner.
3. When the container is full, the suction flow is shut off by the float ball.
4. Switch off the vacuum cleaner before emptying the container.

### **Vacuum cleaner use, NCF filter:**

1. Connect power supply.
2. Turn on switch to start the vacuum cleaner.
3. When the filter is clogged, the suction power is reduced.
4. Switch off the vacuum cleaner before emptying or cleaning the filter.
5. Connect the compressed air line to the compressed air feeding hose to start filter cleaning.
  - a. Repeat filter cleaning is done by a new connection for 15 seconds.
6. Disconnect the compressed air when done.

### **Vacuum cleaner use, preseparator:**

1. Connect power supply.
2. Turn on switch to start the vacuum cleaner.
3. When the filter is clogged or the preseparator is full, the suction power is reduced.
4. Switch off the vacuum cleaner before emptying the preseparator or cleaning the filter.
5. Clean the filter as described in *Vacuum cleaner use, NCF filter*.



## Service

### **WARNING! Risk of personal injury.**

Completely disconnect the vacuum cleaner from all power sources before any type of service.

#### **External control, unit off:**

- Control and replace cables and plugs if damaged.
- Replace leaking suction hoses and couplings

#### **Internal control, unit off:**

- Check regularly that the rubber pad on the wear plate in the silo is not damaged or frayed.

#### **Internal control, unit on:**

- Replace worn out and leaking gaskets.
- Repair or replace worn out filters to avoid wear and tear of the turbine rotor or blow through of dust.
- Replace torn or full dust bag.
- Repair or replace reusable dust bag. Clean the dust bag if it becomes dirty.

#### **Control with top cover attached, unit on:**

- Start the motors in sequence using the main switch. If the main switch does not function properly or is damaged, replace it.
- If specified vacuum is not reached, check all gaskets and connections. Execute the vacuum test with suction inlet(s) closed.
- If the noise level is higher than the maximum specified, dismantle the silencer hood and check the silencing material. Replace it if it is damaged.

#### **Control with top cover removed, unit on:**

- Start the vacuum with the top cover removed.
- Control that the motors are running clockwise as seen from above.

### **WARNING! Risk of personal injury.**

Do not touch the motor with any tool during this operation.

- Control the thermal function by clogging the cooling air inlets with sheets of paper. The vacuum should soon stop without getting overheated (about 75°C/167 °F).

#### **Control with top and secondary covers removed, unit off:**

- Control that all cable connections are properly secured and screws tightened.
- Control that the carbon brushes are not worn out. Replace them if necessary.
- Control wear of commutator. Replace motor if commutator is grooved.
- Turn motor. If there is resistance in the bearings or turbo fan, replace the motor.
- If any wiring in the circuit board is burned, replace the card.

## Trouble Shooting

<b>Problem</b>	<b>Fault</b>	<b>Solution</b>
Motor will not start		
	Electrical supply not connected	Connect the electrical supply.
	Thermoswitch not reset or defect (T-mod)	Dismantle top cover and clean or exchange cooling air filter. Reset the thermoswitch. If the thermoswitch is defect, please contact your distributor.
	Switch supply or cable defect	Contact your distributor
	Radio interference suppression defect	Contact your distributor
None or bad suction capacity	Switch not completely turned on	Turn on
	One or two motors defect	Dismantle top cover, control the brushes and commutators. If the brushes are worn out, please replace. If the commutators are burnt, contact your distributor.
	Clogged suction hose or inlet	Disconnect suction hose. Turn and suck in the opposite direction. If still clogged, open it with a rod.
	Clogged filter	For filter bag and cartridge filter cleaning; please see operation instruction.  NCF filter cleaning; check filter cleaning function by listening to noise from blow-out valve. If not in operation, check quick coupling and function of blow-out valve.
	Leaking suction hose	Tape or replace suction hose.
	Leaking gaskets	Damaged neoprene gasket; remove and replace. Use suitable two-component glue.
	Discharge valve open.	
Dust in exhaust air	Filter wrongly or not installed	Check the filter and change if necessary.
	Filter defect	Change filter.
Water in exhaust air	Filter basket or float ball wrongly or not installed	Reattach filter basket or float ball.  Please see operation instruction.
	Filter basket or float ball defect	Change.
Abnormal noise level	Leaking gaskets	Damage on neoprene gasket; remove and replace. Use suitable two-component glue.
	Sound absorbing material defect	Dismantle the silencer hood and remove dirt. Replace damaged silencing material.

CUSTOMER: \_\_\_\_\_

VACUUMER TYPE/MODEL: \_\_\_\_\_

SERVICE DATE \_\_\_\_\_ SERVICED BY: \_\_\_\_\_

		OK	RE-PAIRED	RE-PLACED	REPLACED PART CODE NO.
<b>1.0</b>	<b>CONTROL WITHOUT RUNNING, OUTSIDE</b>				
1.1	Silencer				
1.2	Compressed air hose				
1.3	Container(s)				
1.4	Trolley				
1.5	Suction hose(s)				
1.6	Preseparator/cyclone				
1.7	Accessories				
1.8	Other items, specify				

<b>2.0</b>	<b>CONTROL WITHOUT RUNNING, INSIDE</b>				
2.1	Gasket(s)				
2.2	Lid, vacuum head				
2.3	Container(s)				
2.4	Filter(s)				
2.5	Dustbag				
2.6	Float ball				
2.7	Other items, specify				

<b>3.0</b>	<b>CONTROL RUNNING, (TOP COVER INSTALLED)</b>				
3.1	Start/stop switch function				
3.2	Vacuum				
3.3.	Noise level				

<b>4.0</b>	<b>CONTROL RUNNING, (TOP COVER DISMANTLED)</b>				
4.1	Rotation motors				
4.2	Thermoswitch function				

<b>5.0</b>	<b>CONTROL WITHOUT RUNNING, (TOP AND SECONDARY COVERS DISMANTLED)</b>				
5.1	Electric cable connections				
5.2	Carbon brushes				
5.3	Commutator wear				
5.4	Motor wear				
5.5	Radio disturbance compression card				

<b>6.0</b>	<b>OTHER ITEMS (SPECIFY)</b>				
6.1					
6.2					

<b>6.0</b>	<b>OTHER ITEMS (CONT.)</b>				
6.3					
6.4					
6.5					
6.6					
6.7					
6.8					
6.9					



**WARNING! Risk of personal injury.**

Completely disconnect the vacuum cleaner from all power sources before any type of service.

- 1.2 Control the cable and plug, and replace it if damaged.
- 1.5 Replace leaking suction hoses and couplings.
- 2.1 Replace worn out, aged and leaking gaskets.
- 2.4 Repair or replace worn out filters to avoid wear and tear of the turbine rotor or blow through of health hazardous materials.
- 2.5 Replace torn or full antistatic dust bag.  
Repair or replace reusable dust bag. If it is clogged, wash or shake it clean.
- 2.6 Clean the water level limiting device regularly and examine it for signs of damage.
- 3.1 Start the motors in sequence using the main switch. If the main switch does not function properly or is damaged, replace it.
- 3.2 If specified vacuum is not reached, check all gaskets and connections. Execute the vacuum test with suction inlet(s) closed.
- 3.3 If the noise level is higher than the maximum specified, dismantle the silencer hood and check the silencing material. Replace it if it is damaged.



**WARNING! Risk of personal injury.**

Do not touch the motor with any tool during the following operation '4.1' below.

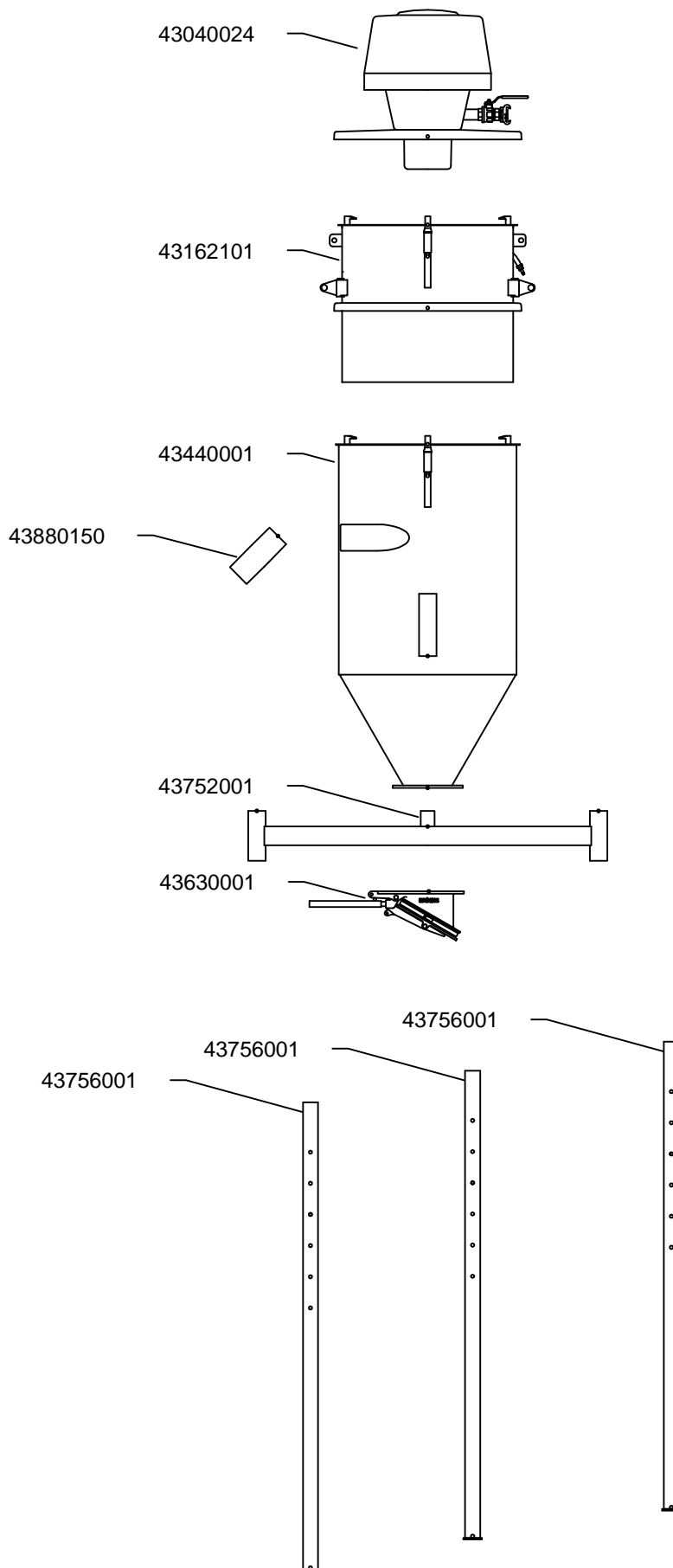
- 4.1 Start the vacuum with the top cover removed.  
Control that the motors are running clockwise as seen from above.
- 4.2 Control the thermal function by clogging the cooling air inlets with sheets of paper. The vacuum should soon stop without getting overheated (about 75°C/167 °F).
- 5.1 Control that all cable connections are properly secured and screws tightened.
- 5.2 Control that the carbon brushes are not worn out. Replace them if necessary.  
Replace after about 900 hours. Replaced brushes must be checked after 500 hours.
- 5.3 Control wear of commutator. Replace motor if commutator is grooved.
- 5.4 Turn on motor. If there is resistance in bearings or turbo fan, replace the motor.
- 5.5 If any wiring in the printing card is burned, replace the card.

## Model specification

**Description:** 600A - NE76, S200 w/original Vyon F candle filters

**Model:** 42160081

Code no.	Description	Qty.
43040024	NE76, S200 w/1 q.coupl	1
43162101	NCF3.15-I S200 Vyon F	1
43440001	Silo S200 f/leg w/ih d76	1
43752001	Triangular frame f/silo S200	1
43756001	Leg straight L=1500mm	3
43630001	Discharge valve manual	1
43880150	Hose joint d76 conical	1





MAX 8 bar



S235JR(St37.2)

- 43904001
- 43904101
- 43904201

- 43904002
- 43904102
- 43904202

43903010

43909001

43909008

System 50

- 43610001
- 43610011 A4
- 

System 200

- 43615001
- 43615011 A4
- 

- 43621001
- 43621200 A4
- 

- 43937006
- 43937007



43905020



43937010

System 50

- 43901052
- 43901050

System 200

- 43901053
- 43901051

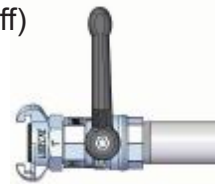
43908003

	Vacuum producer	Compressed air consumption	Max. vacuum		Max. air flow	Noise level*	Ejector body
		Nm <sup>3</sup> /min	mmWC	-kPa			
<input type="checkbox"/>	NE22	1,0	2100	21	306	72,0	43905001
<input type="checkbox"/>	NE32	1,6	3100	31	342	74,0	43905002
<input type="checkbox"/>	NE42	2,2	4200	42	360	73,5	43905003
<input type="checkbox"/>	NE52	3,0	5200	52	342	75,5	43905004
<input type="checkbox"/>	NE56	2,7	2500	25	564	73,5	43905005
<input type="checkbox"/>	NE64	4,3	6800	68	330	77,0	43905006
<input type="checkbox"/>	NE66	4,1	3800	38	630	76,5	43905007
<input type="checkbox"/>	NE74	5,3	7800	78	318	75,0	43905008
<input checked="" type="checkbox"/>	NE76	5,4	4800	48	690	78,0	43905009
<input type="checkbox"/>	NE96	8,6	6800	68	660	78,0	43905011
<input type="checkbox"/>	NE56x2	5,4	2500	25	1128	76,5	43905005
<input type="checkbox"/>	NE96x2	17,2	6800	68	1320	79,0	43905011
<input type="checkbox"/>							

\*Noise level - distance: 3 m - height: 1,1 m

(Air pressure 7 bar)

0 (Off)

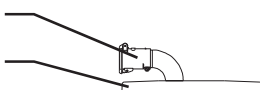


1 (On)



43885001

- 43612001



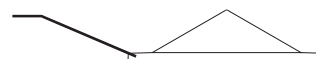
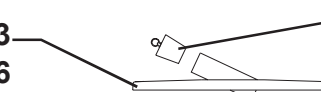
43885001

- 43616007
- 



- 43616100 d63
- 43616200 d76

- 43615020
- 43615031



- 43901021 d63

- 43901022 d76

**43 0 40 024**

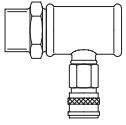


MAX 8 bar

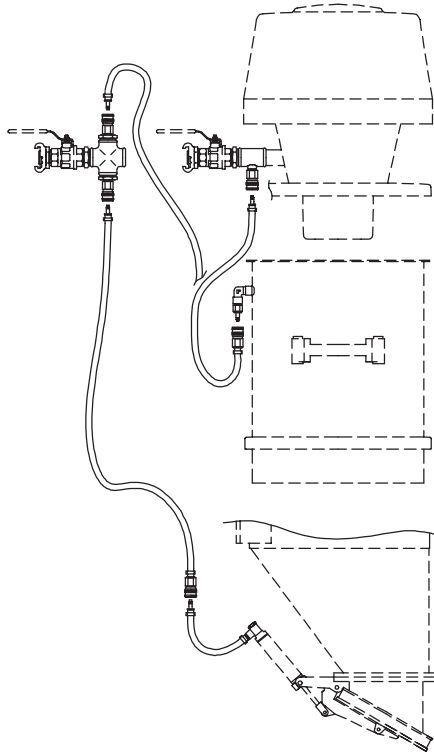
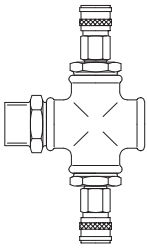


S235JR(St37.2)

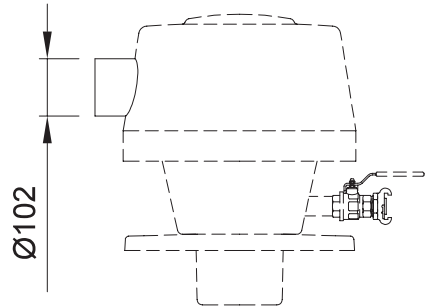
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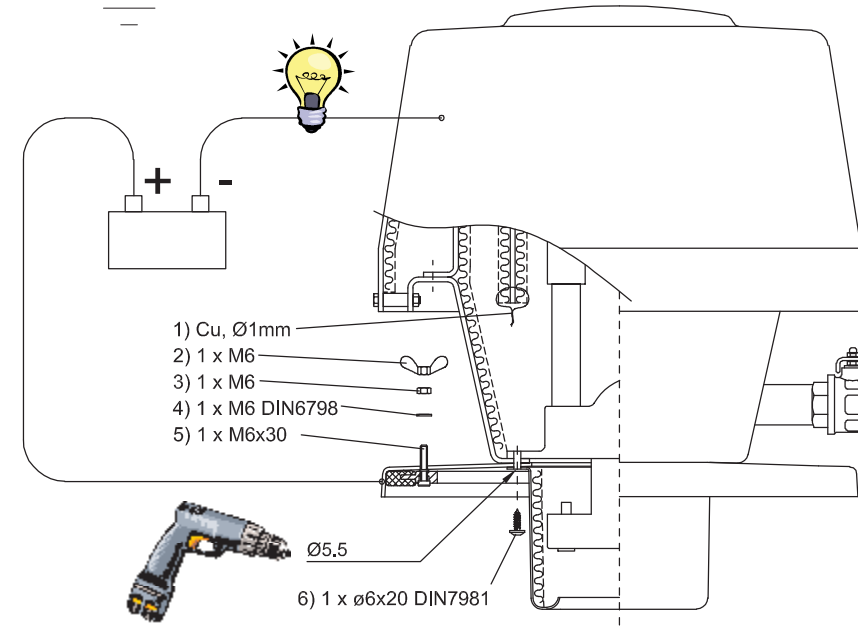
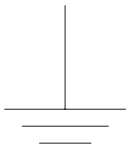
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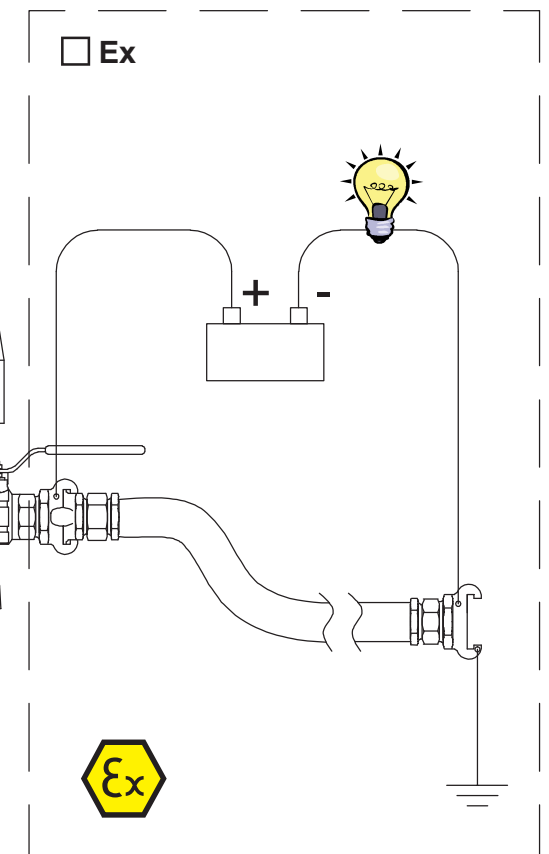
**Y**



**Z**



**Ex**



**43 0 40 024**





MAX 8 bar



S235JR(St37.2)

43999021

43999012

System 50

43999031

System 200

43999033

System 50

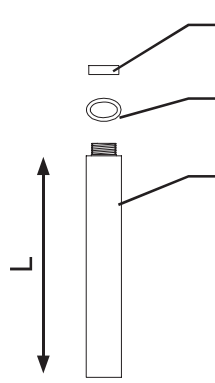
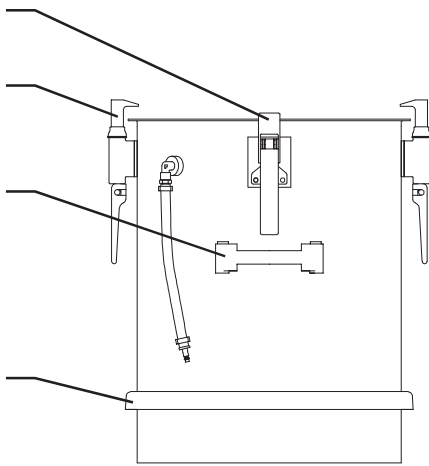
43901004

System 200

43901005

43901053

43901051



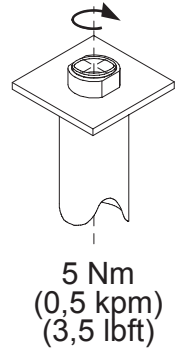
43908005

43901013

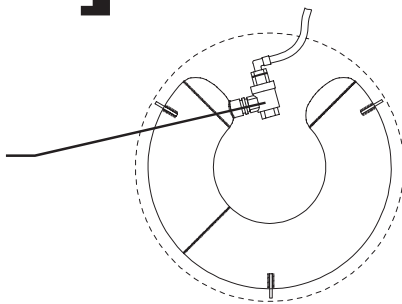
L=300, NCF 1.6/3.15

L=400, NCF 4.2

L=500, NCF 5.25



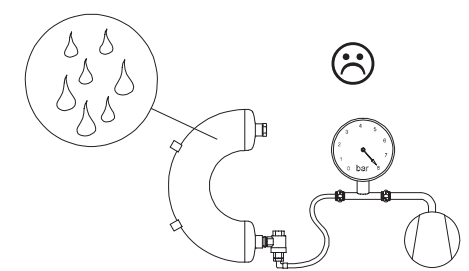
43909020



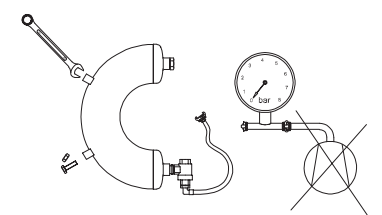
		Area m <sup>2</sup>	Candle mm	Volume* liter	Candles
<input type="checkbox"/>	NCF 1.6	1,6	300	2,9	36
<input checked="" type="checkbox"/>	NCF 3.15	3,15	300	7,6	70
<input type="checkbox"/>	NCF 4.2	4,2	400	7,6	70
<input type="checkbox"/>	NCF 5.25	5,25	500	10,4	70

	Code no.	Material	Candle mm	T <sub>min</sub>	T <sub>max</sub>	EN 60335-2-69
<input checked="" type="checkbox"/>	43906010	Vyon	300	-10°C	70°C	U
<input type="checkbox"/>	43906012		400	-10°C	70°C	U
<input type="checkbox"/>	43906011		500	-10°C	70°C	U
<input type="checkbox"/>	43906050	PET w/membrane	300	-10°C	80°C	H12
<input type="checkbox"/>	43906051		400	-10°C	80°C	H12
<input type="checkbox"/>	43906052		500	-10°C	80°C	H12
<input type="checkbox"/>	43906042	PPF	500	-10°C	110°C	U

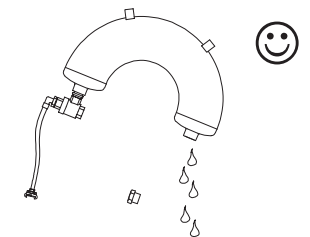
1



2

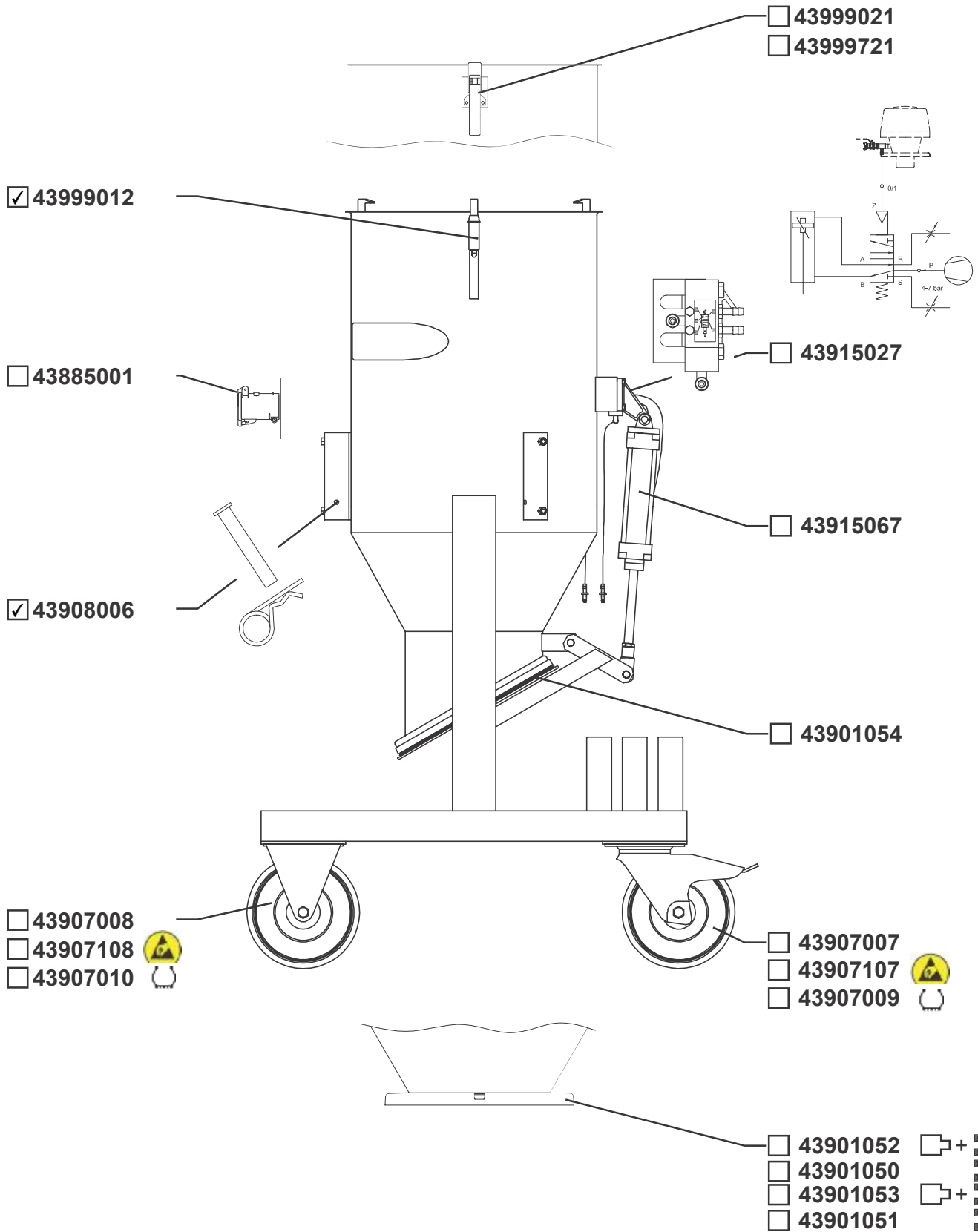


3





S235JR(St37.2)



43 4 40 001



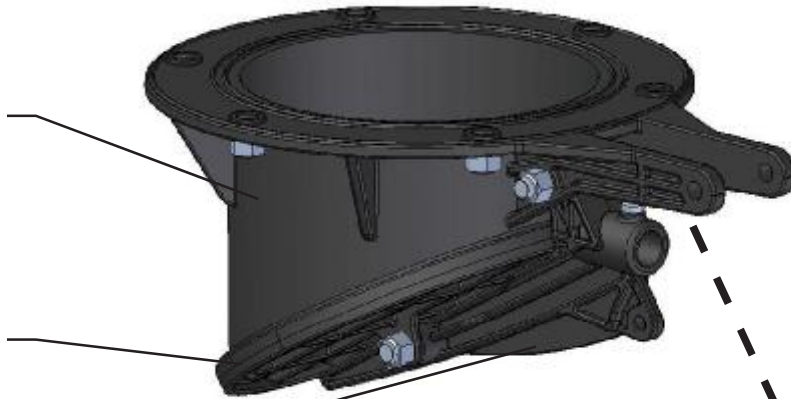
MAX 1.5 bar



43901007



43999071



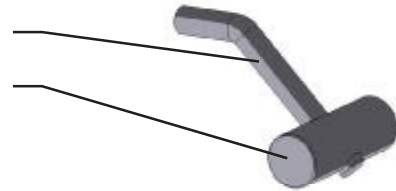
43999075



43999072



43999200



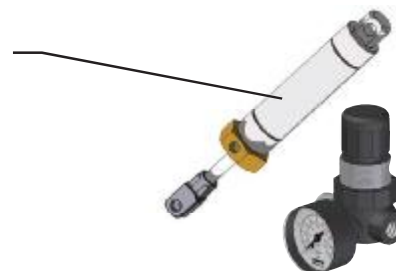
43999069



43999073



43915070



43 6 30 001

# Addendum to Manual



NE	-mmWC	-kPa	Nm <sup>3</sup> /hr
22	2100	21	306
32	3100	31	342
42	4200	42	360
52	5200	52	342
56	2500	25	564
64	6800	68	330
66	3800	38	630
74	7800	78	318
76	4800	48	690
96	6800	68	660
56x2	2500	25	1128
96x2	6800	68	1320



6 - 8 bar OK!

