

**EXHAUST CAPS FOR FORKLIFT TRUCKS** 

Inner diamet	er	REF
(inch)	Ø (mm)	
2" 2" 1/4 2" 1/2 2" 3/4 3" 3" 1/2 4"	51 57 63 70 76 89 102	107TA1881 107TA1882 107TA1883 107TA1884 107TA1885 107TA1886 107TA1887



# **FLEXIBLE EXHAUST PIPES**

Inner Diameter	REF galvanised	REF stainless steel
38 mm	107TA1862	-
40 mm	107TA1864	107TA1863
42 mm	107TA1865	-
45 mm	107TA1867	107TA1866
48 mm	107TA1868	-
50 mm	107TA1872	107TA1869
55 mm	107TA1873	107TA1870
60 mm	107TA1874	107TA1871
65 mm	107TA1875	-
70 mm	107TA1878	107TA1876
75 mm	107TA1879	107TA1877
80 mm	107TA1880	-

# HACKSAWS AND SET OF BLADES



# F

EXHAUST CLAMPS

# STANDARD EXHAUST CLAMPS

M. · · ·	
Inner Ø	

Inner d (mm)	iameter (inch)	Tube ou (mm)	ter diameter (inch)	REF
35	1" 3/8	32	1" 1/4	107TA1895
38 41	1" 1/2 1" 5/8	35 38	1" 3/8 1" 1/2	107TA1896 107TA1897
44	1" 3/4	41	1" 5/8	107TA1898
48 51	1" 7/8 2"	44 48	1" 3/4 1" 7/8	107TA1899 107TA1900
54	2" 1/8	51	2"	107TA1901
58 60	2" 1/4 2" 3/8	54 57	2" 1/8 2" 1/4	107TA1902 107TA1903
67	2" 5/8	63	2" 1/2	107TA1904
73 79	2" 7/8 3" 1/8	67 76	2" 3/4 3"	107TA1905 107TA1906
105	4" 1/8	102	4"	107TA1907

# **HEAVY DUTY EXHAUST CLAMPS**



# **CATALYTIC CONVERTERS FOR FORKLIFTS**

#### What is a catalytic converter ?

 Catalytic converters reduce emissions of dangerous carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NOx) and odour from diesel, gas, natural gas and propane-powered equipment

#### **Untreated emissions**

- Carbon monoxide (CO) is an odourless and colourless gas that causes headaches; in high concentrations, it can even cause death.
- Hydrocarbons (HC) cause eye & throat irritation and are responsible for odours and irritating fumes.
- Emissions from internal combustion powered equipment cause serious health hazards to employees working in enclosed environments.

#### **CO Emissions Comparison**



#### What can catalytic converters do ?

• Catalytic converters reduce emissions of carbon monoxide (CO) up to 99%, hydrocarbons (HC) up to 90% and diesel particles by up to 30%.

#### How does a catalytic converter work ?

- A catalytic converter contains a honeycomb in a steel housing or muffler.
- The honeycomb is coated with a catalyst formula, which enduces chemical reactions as exhaust gasses enter and pass through the honeycomb.
- The effect of the catalyst formula is the conversion of the toxic gasses into harmless carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O).

#### **Oxidation catalytic converters ?**

 Oxidation catalytic converters, or two-way catalytic converters, convert poisonous carbon monoxide (CO) and hydrocarbons (HC) into carbon dioxide and water.

#### **Three-way catalytic converters ?**

- Unlike oxidation catalytic converters, three-way catalytic converters offer the added reduction of nitrogen oxides (NOx).
- Three-way catalytic converters offer added NOx reduction by using a digital air/fuel ratio controller to maintain an optimum air/fuel ratio.
- The use of the air/fuel ratio controller combined with advanced three-way catalyst coating results in the elimination of toxic exhaust and the reduction of fuel consumption.



#### Catalytic converter advantage

- Each catalytic converter contains a patented stainless steel honeycomb, which is brazed to its stainless steel shell.
- The unique brazed design eliminates the possibility of the honeycomb loosening, cracking or telescoping inside the catalyst.

# For further information, please contact us.

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CONVERTERS

CATALYTIC

# **INLINE CATALYTIC CONVERTERS**



- Inline catalytic converters are custom-designed units made to suit each equipment make and model.
- Inline catalytic converters replace the exhaust tubing between the exhaust manifold and muffler, eliminating costly exhaust system modification and downtime.

# STANDARD DESIGN DIESEL CATALYTIC CONVERTERS



- Oxidation catalytic converters install directly in the exhaust gas stream between the exhaust manifold and muffler.
- Standard design catalysts are available either with two quick-release clamps, for removal of the catalyst center body, or as all-welded units with a fixed catalyst center body.

#### **CATALYTIC MUFFLER CONVERTERS**



- Catalytic muffler converters are direct replacement mufflers, making installation quick and easy.
- Catalytic muffler converters offer exhaust purification without compromising noise reduction or creating excessive backpressure.
- · Available in two or three-way catalyst reduction.

#### STANDARD DESIGN LPG CATALYTIC CONVERTERS



- Standard catalysts for LPG engines clamp directly onto the existing tailpipe.
- Every catalyst is an exact fit, making installation quick and easy.

Treatment of exhaust fumes: each engine produces emissions at different pollution levels. Exhaust fumes in PPM (particles per million)

Typical exhaust gas levels	harmfulness	LPG	Diesel	Gas
CO: Carbon oxides	toxic	380 - 10000	180 - 4000	18000 - 70000
NOx: Nitrogen oxides	toxic	180 - 4500	260 - 2000	250 - 4500
HC: Hydrocarbons	toxic	90 - 300	275 - 2000	250 - 600
Aldehydes	irritants	10 - 100	10 - 300	100 - 300
Soot / particle matter	toxic	-	0,24 g/m³	0,05 g/m³

Solution:

# 1) Oxidation catalytic converters.

The 2-way catalytic converter reduces CO gasses up to 99 % and HC gasses up to 90 %.

# A) STANDARD CATALYSTS FOR DIESEL ENGINE

standard welded design



REF	Displacement	Dime	nsions (m	m)		
	(*)	А	В	С		
107TA1908	2380 cc	38	79	184		
107TA1909	2380 cc	44 •	79	184		
107TA1910	2380 cc	51•	79	184		
107TA1911	2380 cc	64	79	184		
107TA1912	3970 cc	38	234			
107TA1913	3970 cc	44	234			
107TA1914	3970 cc	51•	234			
107TA1915	3970 cc	64•	102	234		
107TA1916	3970 cc	76•	102	234		
107TA1917	6290 cc	51	127	244		
107TA1918	6290 cc	64	127	244		
107TA1919	6290 cc	76•	127	244		
107TA1920	6290 cc	89	127	244		
107TA1921	6290 cc	102	127	244		
107TA1922	9230 cc	64	152	264		
107TA1923	9230 cc	76	152	264		
107TA1924	9230 cc	89	152	264		
107TA1925	9230 cc	102	152	264		

-	-	C
REF	Displacement	

410.

CA		—В	
	-	D	_

REF	Displacement		Dimensi	ons (mm	1)	
	(*)	А	В	С	D	
107TA1926	2380 cc	38	79	107	203	
107TA1927	2380 cc	44•	79	107	203	
107TA1928	2380 cc	51•	79	107	203	
107TA1929	2380 cc	64	79	107	203	
107TA1930	3970 cc	38	102	133	244	
107TA1931	3970 cc	44	102	133	244	
107TA1932	3970 cc	51•	102	133	244	
107TA1933	3970 cc	64•	102	133	244	
107TA1934	3970 cc	76•	102	133	244	
107TA1935	6290 cc	51	127	159	254	
107TA1936	6290 cc	64	127	159	254	
107TA1937	6290 cc	76•	127	159	254	
107TA1938	6290 cc	89	127	159	254	
107TA1939	6290 cc	102	127	127 159		
107TA1940	9230 cc	64	152	184	276	
107TA1941	9230 cc	76	152	184	276	
107TA1942	9230 cc	89	152	184	276	
107TA1943	9230 cc	102	152	184	276	

standard design with clamps

 $(\bullet) = in stock.$ 

(\*) for turbo engines, please contact us.

# For further information, please contact us.

**REF 107TA7671** 

11.77 (300)

**REF 107TA7672** 

32 (23,9)

192 (326)

3.12 (79)

2.04 (52)

2.04 (52)

11.77 (300)

#### **B) CATALYSTS FOR LPG & GAS ENGINES (LEAD FREE)**





D inch (mm)

# **C) CUSTOM REPLACEMENT CATALYST**

C) CUSTOM	REPLACEMENT CATA	LYST	all Selection,
Inline and cataly Please indicate y Different models	tic muffler converters, replace our make of truck + make of in stock.	STD-muffler ! engine. This is call	only a small details for further details
Example:	machine model	engine model	REF
CLARK	DPM 12-15-17-20S	MITSUBISHI S4E	107TA1944
	DPM 12-15-17-20S	MITSUBISHI S4E2	
CLARK	DPM 20-25-30	MITSUBISHI S4E	107TA1945
DAEWOO	G20-2S.30	HERCULES 2.7 L LPG 2 way	105TA6874
DAEWOO	D20-2S.30	DAEWOO DB33 DIESEL	107TA1946
DAEWOO	G20-2S.30	HERCULES 2.7 L LPG 2 way	107TA1947
DAEWOO	D50-60-70	PERKINS 4.236 DIESEL	107TA1948
DAEWOO	D20-2S.30-S3	DAEWOO DB33 DIESEL	107TA1949
DAEWOO	GC20-2S.30 S3	HERCULES 2.7 L LPG 2 way	107TA1950
DAEWOO	GP 20-2S-30 S3	HERCULES 2.7 LPG 2 way	107TA1951
DAEWOO	G25E	MITSUBISHI 4G64 LPG 2 way	107TA1952
HYSTER	H12.00 XL	PERKINS 1006.6 DIESEL	105TA6870
ΤΟΥΟΤΑ	5FD20-25-30	TOYOTA 1Z	107TA1953
MITSUBISHI	FD20-25 F18A	MITSUBISHI S4E	107TA1954







# 2) 3-way converters

The 3-way catalytic converters reduce harmful gases, including nitrogen oxides (NOx) by up to 95%. A 3-way system allows trucks with LPG engines to work safely in enclosed areas due to extremely low emission levels.

Please indicate your make of truck + make of engine. Different models in stock.

More than 1.000 different models available: ALLIS CHALMERS - CATERPILLAR - CLARK - DAEWOO - FIAT HYSTER - KOMATSU - LINDE - MANITOU - MITSUBISHI NISSAN - TOYOTA - TCM - YALE

# For further information, please contact us.

CATALYTIC

**REF 107TA7674** 

53 (39,5)

318 (540)

4.00 (102)

1.75 (44)

1.75 (44)

13.75 (350)

13.75 (350)

**REF 107TA7673** 

53 (39,5)

318 (540)

4.00 (102)

2.04 (52)

2.04 (52)

#### **EXHAUST FUME WASHER**

- The exhaust fumes are led through a water bath.
- The water retains the soot. Advantage: cost price. Disadvantage: lower efficiency, daily maintenance.

#### WATER-MUFFLER FOR DIESEL EXHAUST GAS.

This type of water muffler gives an answer to the problem of the "black smoke", which is caused by diesel engines. By reducing the grade of black smoke, and soot by 85% and consequently a large part of all bad smelling and irritating substances with the help of an exhaust gas "cleaning" mechanism.

Fumes pass through the cleaning fluid (water) in order to deposit all unburnt hydrocarbons, at the bottom of the tank, as a part of sulphurous compounds and aldehydes (which are the reason for the typical smell and grade of smoke of diesel engines). With the help of this cleaning system a considerable temperature drop of exhaust fumes is also reached, in this way the transformation of nitric oxides into very noxious nitric dioxides is avoided. They are kept constantly under the flash point of eventual fumes present in the working environment.

- It is an excellent silencer and spark quencher in conformity with explosion-proof standards CEI 31-11 and European standards CENELEC EN 50014 and 50018.
- Its temperature is lower than class "T5" (100° C).
- Works as spark arrestor also without water.

#### **MOUNTING:**

It can be mounted on any part of the forklift, even if it is far away from the engine.

- 1. Remove the pre-existing muffler (in order to avoid an increase in back pressure).
- 2. Fix the muffler on the forklift chassis by means of the fitting brackets which you can find on the lower part.
- 3. Connect the tube coming from the manifold to the inlet flange of the muffler by inserting a flexible tube section between them

#### **MAINTENANCE:**

The maintenance is very simple, fast and economic.

Actually, it simply requires the water replacement every 8 working hours. Emptying the tank first, opening the fitting tap and afterwards refilling the tank with water.

Clean the muffler every 300 working hours.

Empty the water tank and wash the inside with a pressure water jet for 2 or 3 minutes.

#### WARNING:

Do not use sea water (salt) or water-containing chloride !!!





#### **REF 124TA2654**

This product is used to keep the inside of the purifier clean; extending maintenance intervals. TAM additive also serves to improve purification by neutralising sulphuric and sulphurous acids and nitrogen oxides. We recommend using a fresh dosage of TAM additive every time the body of water is replaced. The TAM additive is provided in convenient containers with screw caps holding a volume of 150cc.

#### **IMPORTANT NOTE FOR GUARANTEE**

The Gorgo purifiers are entirly manufactured in AISI 316 stainless steel. This material is resistant to high temperature and to corrosive sulphurous compounds wich are present in the exhaust gas.

In spite of all that, in some applications, permanent corrosion damage can be caused, and is not covered by the guarantee.

The causes of the corrosion can be the followings:

- · use of fuel with high sulphur content
- use of water with a chlorine content of > 50 ppm
- use of seawater or brakish water
- irregular purifier maintenance, you must change every 8 hours the water and add the TAM Additive (keep your accounts from the additive to beware your guarantee)

# **EXHAUST FUME WASHER**



REF	Engine power	A	ØB	С	ØD	ØE	F	G	Н	ØI	L	Μ	N	0	ØP
107TA1956	up to KW 15 (pk 20)	450	300	600	40	150	290	350	800	50	80	268	205	45	-
107TA1957	up to KW 37 (pk 50)	570	350	700	50	180	350	400	1380	80	110	303	230	60	230
107TA1958	up to KW 59 (pk 80)	660	350	700	50	200	430	400	1380	80	115	303	230	60	250
107TA1959	up to KW 81 (pk110)	750	370	740	60	230	530	420	1420	80	110	342	280	70	280
107TA1960	up to KW110 (pk150)	950	400	740	80	300	620	450	V	100	165	362	290	70	350
107TA1961	up to KW 184 (pk 250)	1000	600	1000	100	400	750	650	1	100	125	556	480	100	450
107TA1962	up to KW 258 (pk 350)	1100	700	1100	120	420	800	750	$\checkmark$	120	150	610	520	100	470

# SOOT FILTER WITH REPLACEABLE CARTRIDGES

#### Soot filter replaceable elements:

• The soot is retained by a special replaceable filter element.

Advantage: Disadvantage:

99,98 % efficiency. replacement of elements (every 300 to 400 hours).

- Please advise truck type + engine power
- + installation counterweight or installation on roof.

#### **Function:**

The "heart" of the soot filter is an interchangeable filter element that is composed of cellulose.

This element has the ability to withstand high temperatures (in comparison with an ordinary filter) and reduces the emission of diesel soot by 99%.

#### **Composition:**

The system consists of a filter housing, with filter element, counter pressure valve + indicator, temperature safety valve + outlet valve and flexibles.

The filter is available for both assembly on the counterweight and assembly on the roof.

#### **Maintenance:**

The element should be replaced every 300 to 400 hours, with normal use.

REF complete	Engine power	Element	REF element
107TA1966	80 PK	Ø11" 340°C	107TA1963 (2x)
107TA1967	60 PK	Ø15" 320°C	102TA6003
107TA1968	50 PK	Ø11" 320°C	107TA1965

Please supply truck model, serial number and engine type









#### **SOOT FILTER FOR DIESEL ENGINES**

#### Soot filter for:

- · Forklift diesel engines, construction machinery
- Stationary diesel engines

#### **Function:**

The soot filter is composed of ceramic materials, packed gas-free in a stainless steel plate. The ceramic monoliths contain a certain number of square cells with parallel channels, which are sealed by turns; the separation between these channels is porous. The diesel exhaust flows through these separations and is filtered by the surface and pores in the ceramic material. This filtration removes up to 98% of soot from the exhaust fumes. The filtered particles are then burnt by regenerating the filter in a separate oven.

#### **Type EWR:**

- · Removes up to 98% of soot
- Life span 8 to 10 hours
- Usable in every situation
- · Adapts to any kind of truck through its element structure
- · Quick and easy change of the filter
- · Continuous operation when using multiple filters
- · Electronically operated filter regeneration within 50 to 90 minutes
- Can be placed horizontally or vertically
- Requires little space, no obstruction of sight
- Only one regeneration oven needed for multiple filters.

REF	SOOT FILTER
107TA1969	0-20 KW
107TA1970	20-60 KW
107TA1971	60-120 KW
107TA1972	120-160 KW
107TA1973	160-200 KW





# **TEMPORARY EXHAUST FILTERS**

# EXHAUST CLEANER FOR STARTING INSIDE BUILDINGS







This filter is an exhaust cleaner for **temporary use** of vehicles in factories, ships, workshops, exhibition halls etc...

The filter functions immediately when starting the truck, gives maximum flexibility indoors and is not affected by moisture.

The filter removes all hazardous substances from the exhaust particles.

# **TECHNICAL DATA**

For use inside buildings

particle separ.	>99,9 %
Co separ.	+/- 30 %
Nox separ.	+/- 60 %
Rc Ho separ.	+/- 90 %
Hc separ.	+/- 35 %
Max. engine	5,5 L cyl col
Max. rpm	2500 rpm
Max const. temp	200°C
Max temp. 30 sec.	350°C

#### Expected lifetime:

> 300 starts; for petrol (3,0 L engine)

> 75 starts; for diesel (3,0 L engine)

Weight

0,4 Kg





connecting cone: d min. = 35 mm d max. = 70 mm **REF 105TA2746** 

replacement element: REF 105TA2745

connecting cone: d min. = 25 mm d max. = 45 mm **REF 105TA2747** 

# PARTICULE DETAINING EXHAUST

EXHAUST & ACCES

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It reduces, as far as possible, the unburnt residues (particules) in the exhaust fumes of diesel endothermic engines. The cylindrical casing with external protection in perforated sheet metal contains a dry filtering cartridge (fire-retardant) which detains the solid particles of the exhaust fumes. In forklift trucks it is rapidly installed instead of the vertical silencer.







Securing solutions

C.S.

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REF	Ø	Length	Discharge	Engine Power
115TA6910	115	800	Vertical	0-52 kw
115TA6912	Filte			

Filter replacement

- Rapid installation
- It acts as a silencer
- it does not create vapours or liquid residues
- it is rapidly replaced
- it is compact
- the cartridges last 200 hours approximately
- global damping of the particules of around 70%

# EXHAUST & ACCESSORIES



## **SPARK ARRESTORS FOR FORKLIFTS**

#### No more flames thanks to the centrifugal system.

- Designed for universal application with a minimum of restriction on the engine.
- They work well as add-on units to existing exhaust systems. Their lightweight and small size reduces stress and vibration to the rest of the exhaust system.
- Typical applications include logging and construction equipment, agricultural machinery, over-the-road trucks, airport equipment, forestry and military vehicles.
- All arrestors exceed U.S. forestry requirements and are qualified and tested for vertical and horizontal installations under the U.S. forestry Service Standard 5100-1b.
- All inlets are slotted tube connections. Outlets are O.D. tubing.
- · CFM rating is based on a pressure drop of 1 PSI.

inner ø A	outer ø B	С	D	E	F	CFM	l/min	REF
27mm - 1,05"	32mm - 1,25"	108mm	81mm	150mm	33mm	80	2266	122TA7586
38mm - 1,50"	38mm - 1,50"	108mm	79mm	150mm	36mm	165	4675	107TA1976
51mm - 2,00"	51mm - 2,00"	143mm	163mm	279mm	51mm	295	8357	108TA8876
64mm - 2,50"	67mm - 2,63"	143mm	218mm	325mm	51mm	450	12748	107TA1978
76mm - 3,00"	80mm - 3,13"	168mm	259mm	378mm	64mm	660	18696	104TA5741
89mm - 3,50"	92mm - 3,63"	194mm	305mm	447mm	76mm	900	25496	107TA1979
102mm - 4,00"	105mm - 4,13"	216mm	371mm	538mm	86mm	1180	33427	122TA7587
127mm - 5,00"	130mm - 5,13"	244mm	406mm	310mm	102mm	1840	52123	122TA7588
152mm - 6,00"	156mm - 6,13"	308mm	559mm	686mm	51mm	2650	75069	122TA7589
A DECEMBER OF THE OWNER	1 1 1 1 1 1 1 1 1	In These	110	and the second sec	The second se			

## **SPARK ARRESTORS**





	Engine power		Dim	Dimensions (mm)		
REF	PK	KW	Α	В	С	D
107TA1974 107TA1975	25-65 50-125	18-48 37-92	70 70	335 401	70 70	188 188

# For further information, please contact us.

FAX FORM: EXHAUST TUBES

	TECHNICAL DETAIL:	EXHAUS	ST TUBE	S FILL IN FORM	
	EXAMPLE			TO FAX	
		Compa	ny:		
9		Custon	ner code:		
	L	Name:			
		Fax nu	mber:		
		Truck n	nake:		
		Truck t	ype:	Serial nr.:	
	MEASUREMENTS			FLANGE TYPE.	
	MEASOREMENTS.	A) 0	val	B) Triangular	
	L1 L3	60			
(D1	-D2)			$( \circ \circ \circ )$	
10.		C) So	juare or ngular	D) Special flange	
	12		- O	previous)	
	r		$\supset$		
$\frown$				E) No flange	
	L1: Minimum distance betwee	en two e	nds (if fl	exible, please stretch out to	
	the full length). Remark: if	3 tubes, t	ake the n	ninimum distance between the	
	tubes with the largest diame	ters.			
2	AT-BO: Number of bends: if flexib	le, this d	oes not	count as a bend, unless it is	
	explicitly seen as a bend.				
(3)	TY-FL Type of flange (see diagra	nms). If 2	differen	t flanges are present,	
$\bigcirc$	nlease note order as men	tionned i	n the lis	t e a AC and not CA	
4	D1: Outer diameter of smalles	st tube.	• Tho	IMPORTANT	
(5)	D2: Outer diameter of largest	tube.	the	outside of the tip of the tube.	
			• If 3 dian	tubes, take the 2 largest neters.	
6	L2: Smallest distance to cent	re of first	bend (s	ee drawing).	
7	L3: Largest distance to centre	e of first l	bend (se	e drawing).	
(8)	L4: Length of flexible, comple	etely stret	ched ou	t (if present)	
	GA:				
(9)	GA: Heat-resistant protection	present y	/es/no		

#### **USED FOR: CATERPILLAR**

	REF	105TA7062
Assessment and a second	L1 AT-BO TY-FL D1 D2 L2 L3 L4 GA	390 1 A 47 47 95 360 275 NO

## **USED FOR: HYSTER**



# **USED FOR: KOMATSU**



# **USED FOR: KOMATSU**



#### **USED FOR: TOYOTA**



#### **USED FOR: HYSTER**



#### **USED FOR: KOMATSU**



REF	105TA7068
L1 AT-BO TY-FL D1 D2 L2 L3 L4 GA	575 4 A 34 43 15 105 155 NO

# **USED FOR: MITSUBISHI**



370
3
E
38
39
50
100
0
NO

#### **USED FOR: TOYOTA**





# **USED FOR MITSUBISHI**



# **USED FOR CLARK**



# **USED FOR KOMATSU**



#### **USED FOR KOMATSU**



#### **USED FOR CLARK**



#### **USED FOR KOMATSU**



# **USED FOR TOYOTA**



#### **USED FOR CATERPILLAR**



#### **USED FOR MITSUBISHI**



745

5 A 43

43

90

130

140

NO





Remark: if 3 tubes, take the minimum distance between the tubes with the

#### IMPORTANT

L3

- The diameters are measured on the outside of the tip of the tube.
- If 3 tubes, take the 2 largest diameters.



L3



# **USED FOR: LINDE**



## **USED FOR: MITSUBISHI**



# **USED FOR: TOYOTA**



# **USED FOR: TOYOTA**





# **USED FOR: TOYOTA**



	REF	105TA6715
()	TY L1 L2 D1 L3 L4 D2 D3 AT-BG	RZZ 330 200 190 0 0 38 42 2

# **USED FOR: TOYOTA**



REF	105TA6760
TY L1 L2 D1 L3 L4 D2 D3 AT-BG	RLZ 350 290 170 0 38 46 2

#### **USED FOR: YALE**



SILENCERS

# **USED FOR HYSTER** REF TΥ

# 104TA5868 RLL L1 L2 D1 L3 L4 D2 D3 AT-BG 380 270 150 0 0 36 36 2

# **USED FOR SAXBY**





# **USED FOR FIAT**



# **USED FOR CLARK**



#### **USED FOR CLARK**



## 104TA5965 REF RLL 305 200 150 0 L3 L4 D2 D3 AT-BG 0 41 48 1

# **USED FOR YALE**

REF	106TA5005
TY L1 L2 D1 L3 L4 D2 D3 AT-BG	RZZ 288 390 157 0 0 35 38 2

# **USED FOR CLARK**



	REF	104TA5849
	ΤY	OLZ
	L1	450
	L2	440
1	D1	0
	L3	190
	L4	130
	D2	48
	D3	53
	AT-BG	2

#### **USED FOR TCM**



# **USED FOR YALE**



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# **ANALYZERS 4-5 GAZ**



#### **REF 122TA7541**

Analyzer 4 gas (CO, HC, CO<sup>2</sup>, O<sup>2</sup>), OIML Class 1 certified

- Shockproof, identification IMPCO
- · Trapdoor for water and filter (5 filters included)
- Charger 12 VAC
- Escape borer
- Interface multi language GB, D, F, SP and NL
- · Transport suitcase and instruction leaflet
- · PC link cable and infrared printer available separately

#### **REF 122TA7542**

Analyzer 4 gas (CO, HC, CO<sup>2</sup>, O<sup>2</sup>), not OIML Class 1 certified

- Shockproof, identification IMPCO
- · Trapdoor for water and filter (5 filters included)
- Charger 12 VAC
- Escape borer
- Interface multi language GB, D, F, SP and NL
- Transport suitcase and instruction leaflet
- PC link cable and infrared printer available separately

#### **REF 122TA7543**

Analyzer 5 gas (CO, HC, CO<sup>2</sup>, O<sup>2</sup>) identical to model 122TA7541 with Nox module and certificate OIML Class 1

· PC link cable and infrared printer available separately

#### **REF 122TA7544**

Analyzer 5 gas (CO, HC, CO<sup>2</sup>, O<sup>2</sup>) identical to model 122TA7541 with Nox module and certificate OIML Class 1

- specific transport suitcase
- feeding cable
- · portable infrared printer
- oil temperature and RPM borers
- PC link cable and infrared printer included

## **REF 122TA7545**

Analyzer 5 gas (CO, HC, CO<sup>2</sup>, O<sup>2</sup>) identical to model 122TA7541 with Nox module but without certificate OIML Class 1

· PC link cable and infrared printer available separately

#### How do you check the emissions of your lift trucks?

The IMPCO portable gas analyser allows you to establish new criteria for use, user-friendliness and interpretation of measurements.

Weight: 1.1 kg, can be held in one hand and has an autonomy of several hours thanks to its built-in battery. The internal memory stores up to 150 measurements of exhaust fumes, performed by controlled applications.

The infrared detection system, a unique feature on devices in this range, can display up to 4 measurements at the same time, and has an optional illuminated display. (Nox optional)

A PC link cable and infrared controlled printer are available separately.

With an accuracy as good as any other quality device, the IMPCO gas analyser is perfectly adapted to the material handling, the pre-conformity test and test on engine diagnostics and tune-up.

The IMPCO analyser can even be used under changing atmospheric pressure and temperatures.

#### Field of operation:

All thermic ignition-based applications

#### Advantages:

For all Gasoline, LPG, GNV applications Measures: CO, HC, CO<sup>2</sup>, O<sup>2</sup>, Lambda, Nox *optional* Temperature and RPM probe Easy to use and to read Up to 150 measurements stored in memory Automatic calibration Autonomy: up to 8 hours stand-by Input: 12, 110, 220 volts



	Max	imum range	Normal range	Resolution
CO HC O <sup>2</sup> CO <sup>2</sup> NOX	0 -	20% 10000 25% 20% - 5000ppm	5% 2000ppm 21% 16% 5000ppm	0,01 1 0,02 0,1 1
Device		Dimensions	240 x 135 x	160 mm

Device	Dimensions	240 X 135 X 160 IIIII
	Weight	1,1 kg
Range of operation	de +5°C until	40°C
Environment	860 - 1060 hP	a
Power supply	12, 110, 230 Volts	
Autonomy	y 8 hours stand-by	
	4 hours operational	
Memory	y Up to 150 registered measurements	

Supplied with a rubber protection sleeve, a water reservoir and filter, a transport case, a sectorial charger/adapter, an exhaust pipe probe, a RPM probe and an oil temperature probe.





Determines efficient combustion and is internationally recognized as the standard method for evaluating smoke density in the flue gasses from distillate fuels. Too much smoke is one of the most common causes of excessive fuel usage and expensive service requirements.

That is precisely why the smoke test set is an indispensable part of any oil burner service job; and with the tester, an accurate smoke reading takes less than a minute. The 10 spots on the scale range in equal photometry steps from white to black to completely cover any smoke condition which may be experienced on residential or commercial oil burners.

**REF 106TA6388** 

#### **CARBON MONOXIDE ANALYSER**

The CO-analyser is a hand-held instrument designed to locate CO in ambient air as well as in stack gasses. The continuous sampling instrument quickly and accurately measures levels of CO between 0 and 2.000 ppm.

#### FEATURES

- quickly measures and displays low levels of CO 0-2.000 ppm
- measures in increments of 1 ppm
- multi-purpose strap for easy holding
- probe and hose assembly for flue gas testing
- highly visible digital display with backlight

#### TYPICAL APPLICATIONS

- CO safety checks on combustion stack gas and ambient air levels
- Analysing indoor air quality and safety
- furnace and boiler servicing or replacement
- BAM verifies CO exposure

#### **REF 106TA6390**



EXHAUST ACCESSORIES

# **PIPE CUTTER**



**REF 111TA1914** diameter: 19-76 mm

# PIPE EXPANDER



**REF 111TA1916** 43 - 64 mm

## **PRESSURE GAUGE**



**REF 107TA1980** To check the back pressure between the engine and the catalyst.

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	PIPE EXHAUST SLEEVE	HEAT RESISTANT EXHAUST WRAPPING
ST ACCESSORIES	REF Ø 40 107TA1981 SOLD   Ø 45 107TA1982 Ø 50 107TA1983   Ø 50 107TA1983 Ø 57 107TA1984   Ø 76 107TA1985 Image: Constraint of the second s	REF 111TA4010 - Heat resistant - Length: 50 metre roll
T A T		- Width: 30 mm
х Ш	DIESEL COMBUSTION	EXHAUST REPAIR PASTE
	REF 107TA1989 Improved diesel combustion 400 ml	REF 107TA1992 The quick repair for sound absorbers and outlet systems.
	EXHAUST MOUNTING PASTE	HEAT RESISTANT PAINT
	<b>REF 107TA7713</b> High temperature paste / 200 gr	REF 107TA1990 Black / 400 ml REF 107TA1991 Silver / 400 ml
	HEAT RESISTANT GLOVES HEAT RESIST	ANT GLOVES COPPER SPRAY

**REF 107TA1988** heat resistant glove resists against heat up to 600°C (32sec.)

**REF 107TA1987** heat resistant glove resists against heat up to 350°C (15sec.)



**REF 107TA1986** Copper spray (400 ml)