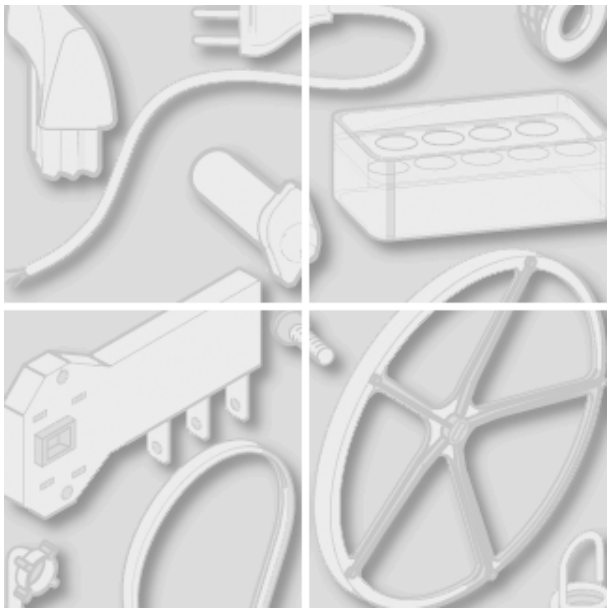
INDESIT company



Model type:
MTA241

Commercial code:
F028990

# General notes

## Technical Documentation guidelines

---

---

You can find herewith some generic information to simplify cunsulting of technical documentation:

1. Models of same range share the same exploded views, which report the richest set of spare parts:generally, a model does not necessarly have a related spare part for each particular shown on exploded views.

2. Some spare parts can not be represented directly on the exploded views (instruction booklets, specific kit, etc...). You can find those codes in the spare parts list with the same reference of particular where spares are installed or with references 099, 999. Instruction booklets, once managed, appear with 000 reference.

3. On the higher right site of each exploded view there is a serial number which indicates the beginning of the production of certain range:some models might have more than an exploded view for a given category, each distinguished by a different serial no.and linked to another spare parts list, In this case, serial no. is required to supply the right spare part code. Exploded view to be considered is the one with a more recent serial no. but previous than the one of the model that needs assistance.

4.Exploded views might require further updates even after publishing. Addition of new spares will go on following the already existing numeration references. Revision number of an exploded view is shown into last four digits of serial number into upper right hand corner.

5.The spare parts list associated to an exploded view shows related codes of spares managed for a certain model; for each spare part other informations are available:

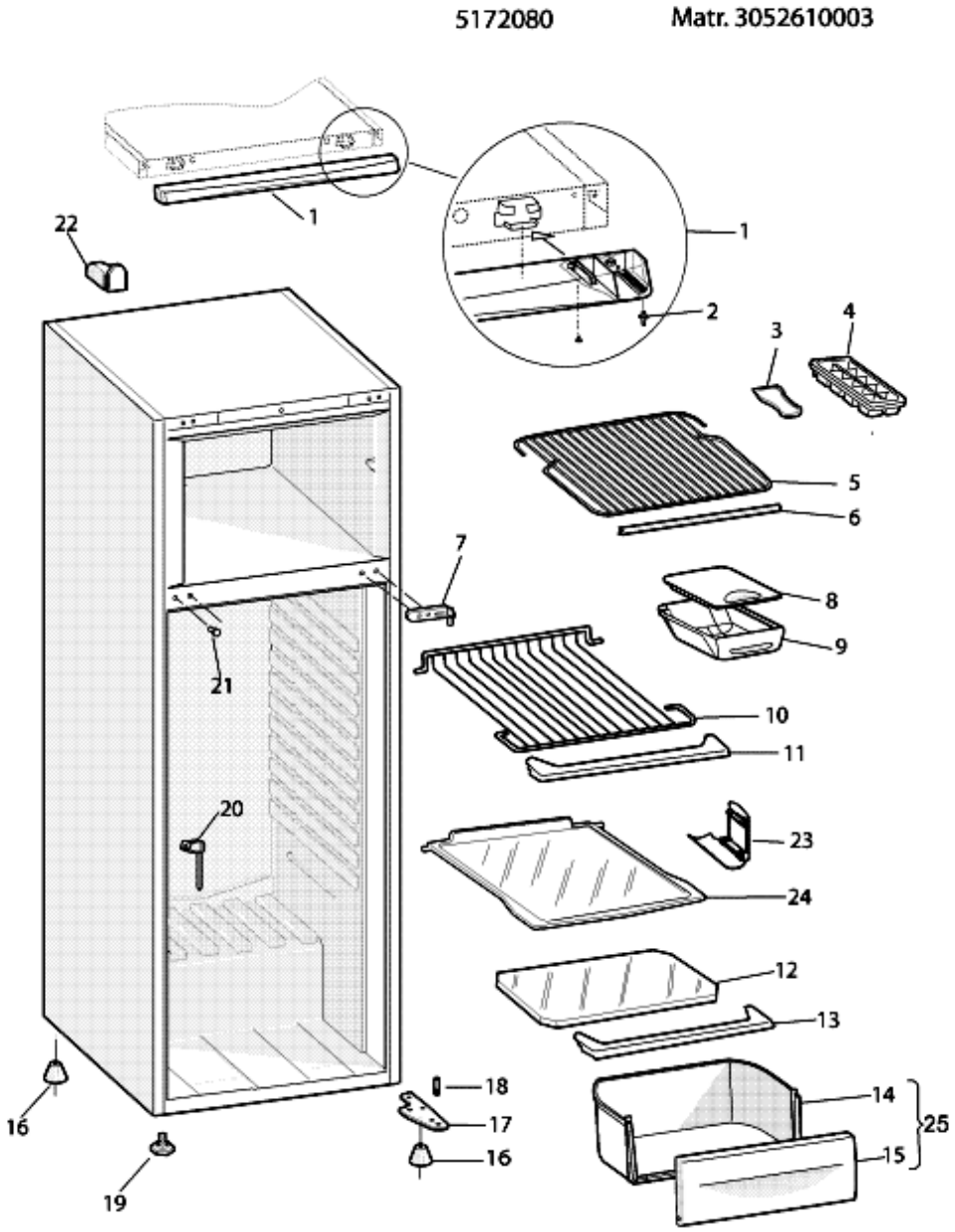
REF: reference no of spare into a table; SUBSTITUTE: list of spare(s) which can replace a code but that keeps same functional characteristics

INDUSTRIAL CODE: list of variables of a model (shown into model label) where such spare is used; NOTICE: code of information(s) to refer to complete technical intervention, track for changes or to find correct spare part code.

6. Some notices, into a same section are generic therefore cannot be directly linked to a spare part. In order to assist a model in the best way as possible, it is helpful to pay attention to all notices and constantly verify documentation updates

7.Technical documentation cover shows model name and its commercial codes

5172080 Exploded views



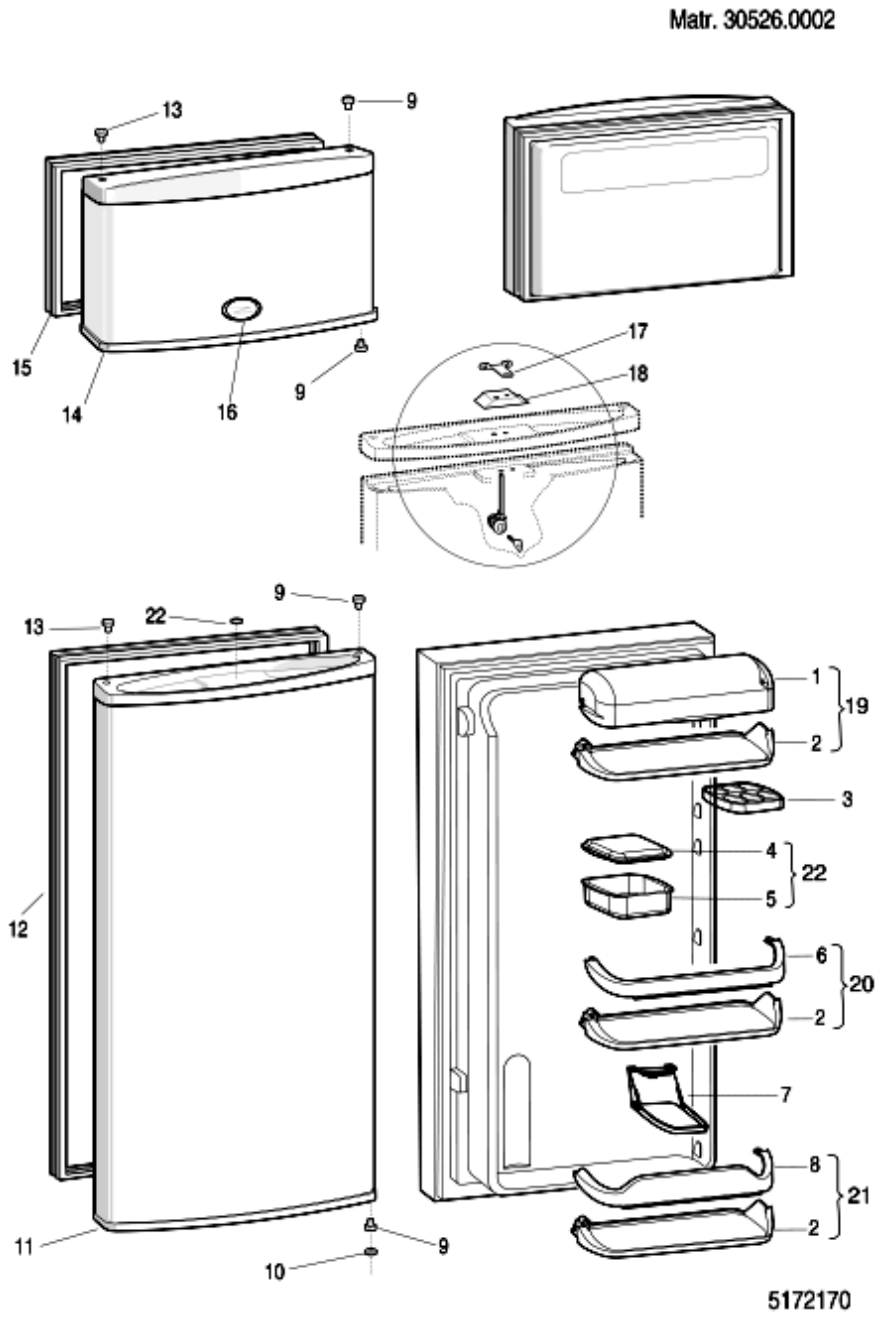
5172080 Spare parts list

| Ref. | Code | From | To S/N | Substitute | Description | Notice | Industrial |
|---|---|---|---|---|---|---|---|
| 000 | C00095531 | | | | user instruction book mta241 (it- | | |
| 001 | C00095473 | | | | top front fascia 546x34x58 - white | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| 001 | C00142593 | | | | top front fascia 546x34x58 - pw | | 47289900201 |
| | | | | | | | 47289900202 |
| | | | | | | | 47289900203 |
| 002 | C00053423 | | | | pin hinge m5x5+17 | | |
| 003 | C00003261 | | | | ice scraper - white | | |
| 004 | C00019414 | | 60401... | | ice cube tray 215x102x34 | | |
| 004 | C00045973 | 60402... | | 1 x C00019414 | ice cube tray (260x110x37) | n2511k01 | |
| 005 | C00053421 | | | | wire shelf 424,5x290mm - white | | |
| 006 | C00053479 | | | | trim 423 mm (wire shelf) - white | | |
| 007 | C00053478 | | 60412... | 1 x C00114624 | central hinge - white 'df245x | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| 007 | C00114624 | | | 1 x C00144850 | central hinge - polar white | n1025158 | 47289900201 |
| 007 | C00141794 | | 60409... | | central hinge - polar white | | 47289900201 |
| | | | | | | | 47289900202 |
| 007 | C00142756 | 60410... | | | central hinge - chrome (240 lt) | | |
| 007 | C00144850 | 60413... | | | central hinge - chrome | | |
| 008 | C00086382 | | | | meat box cover (317x214mm) | | |
| 009 | C00086381 | | 10123... | 1 x C00283755 | meat box (309x215x98mm) - clear | | |
| 009 | C00283755 | 10124... | | | meat box (309x215x98mm) - | n3010j01 | |
| 010 | C00086593 | | | | fridge wire shelf (wxh | | |
| 011 | C00086379 | | | | wire shelf trim (469x59x12mm) - | | |
| 012 | C00086594 | | | 1 x C00280886 | salad bin cover (466x188x4mm) | | |
| 013 | C00086378 | | | 1 x C00144431 | trim 465x48x12mm (crisper | | |
| 014 | C00082949 | | | 1 x C00144901 | crisper kit (wxhxd 460x184x206) - | n1025160 | |
| 015 | C00086596 | | 10123... | | salad bin front (460x155mm) clear | n1025160 | |
| | | | | | | n3010j01 | |
| 015 | C00283264 | 10124... | | | salad bin front (460x155mm) | n3010j01 | |
| 016 | C00017766 | 90210... | | | foot 18mm - non adjustable | | |
| 016 | C00065434 | | 90209... | | foot 15 mm - non adjustable | n2510i00 | |
| 017 | C00053420 | | | 1 x C00053567 | lower hinge (m6) rh-lh - white | | |

5172080 Spare parts list

| Ref. | Code | From | To S/N | Substitute | Description | Notice | Industrial |
|---|---|---|---|---|---|---|---|
| 018 | C00015745 | | | 1 x C00281425 | hinge pin - m6x(5+14) | | |
| 019 | C00053419 | | | | adjustable foot | | |
| 020 | C00022198 | | | 1 x C00045965 | defrost hole cleaner (20x30mm) | | |
| 021 | C00011286 | | | 1 x C00114785 | blanking plug d4,5x8mm - white | | 47289900000<br>47289900001<br>47289900101 |
| 021 | C00114785 | | | | blanking plug (4,5x8mm) - polar | | 47289900201<br>47289900202<br>47289900203 |
| 022 | C00015332 | | | | spacer - condenser | | |

5172170 Exploded views



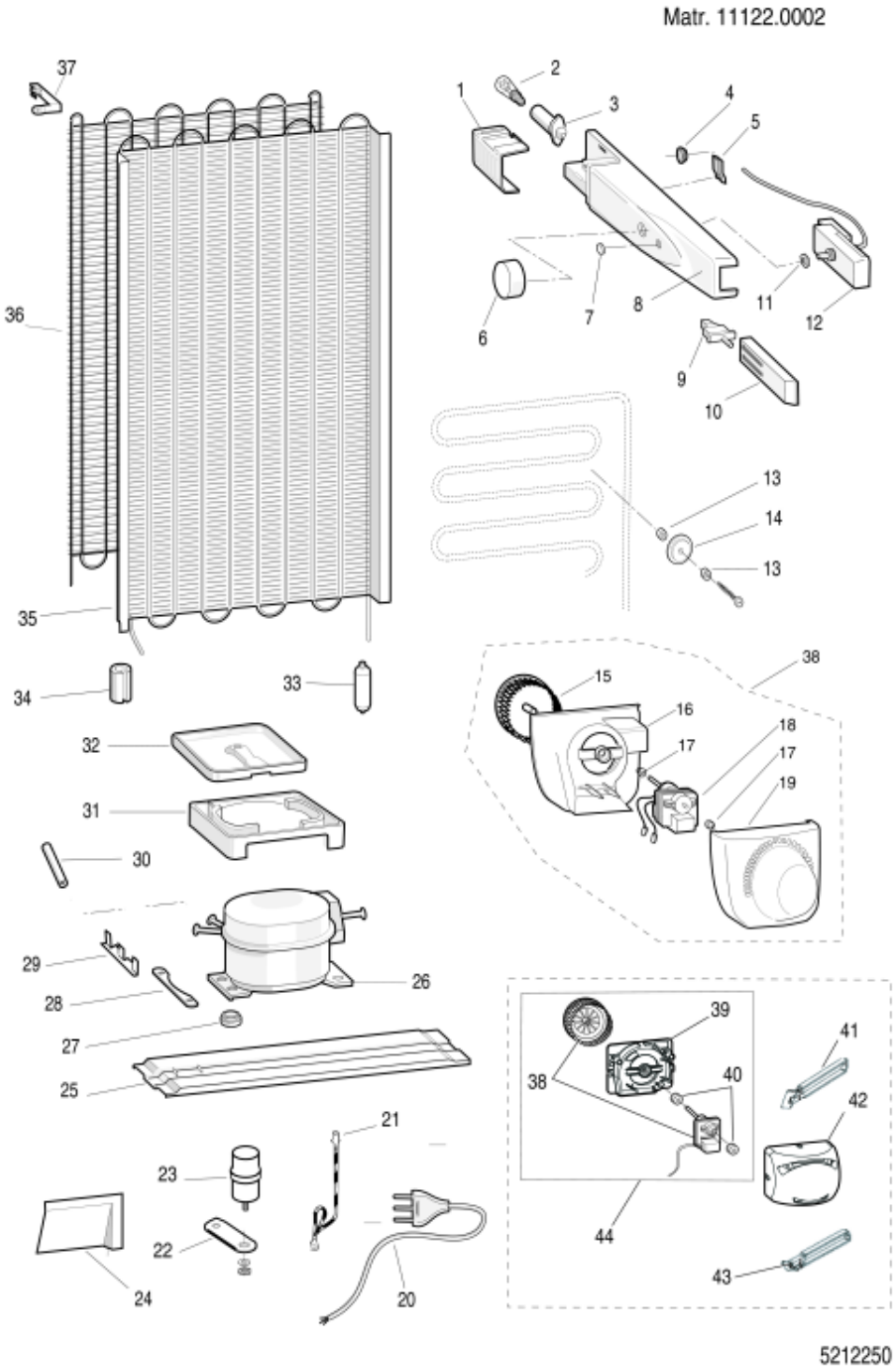
5172170 Spare parts list

| Ref. | Code | From | To S/N | Substitute | Description | Notice | Industrial |
|---|---|---|---|---|---|---|---|
| 001 | C00094621 | | 10123... | | hinged box cover (w.443) clear | n3010j01 | |
| 001 | C00283224 | 10124... | | | rail for door shelf - crystal - 410 | n3010j01 | |
| 002 | C00089093 | | | | door shelf 443x70x104mm white | | |
| 003 | C00081953 | | | | eggs tray (6) (152x95x20) cristal | | |
| 004 | C00086419 | | 01219... | 1 x C00283448 | butter box lid (180x92) blue | | |
| 004 | C00283448 | 01220... | | | butter box lid (180x92) transp. | | |
| 005 | C00086418 | | 01219... | 1 x C00283447 | butter box (152x50x93mm) blue | | |
| 005 | C00283447 | 01220... | | | butter box (152x50x93mm) | | |
| 006 | C00089087 | | 10123... | 1 x C00283224 | central shelf - neutral - 410 mm | n3010j01 | |
| 006 | C00283224 | 10124... | | | rail for door shelf - crystal - 410 | n3010j01 | |
| 008 | C00089088 | | 10123... | 1 x C00283235 | bottle shelf white (w 410mm) | n3010j01 | |
| 008 | C00283235 | 10124... | | | bottle shelf white/crystal (w | n3010j01 | |
| 009 | C00022161 | | 00905... | | hinge bush 4x15 mm - white | | |
| 009 | C00022760 | | 41115... | | hinge bush (9,5 mm) - white | | 47289900000<br>47289900001<br>47289900101 |
| 009 | C00024267 | 41116... | | | hinge bush (7x21.5mm) - white | | |
| 010 | C00028928 | | 61027... | | plastic washer (12x6,4x2 mm) - | | |
| 010 | C00041990 | 61028... | | | plastic washer (12x6.1x4mm) - | | |
| 011 | C00095446 | | | 1 x C00141589 | fridge door-style assy 541x1028 - | n1025145 | 47289900000<br>47289900001<br>47289900101 |
| 011 | C00141589 | | | | fridge door-style assy 541x1028 - | | 47289900001<br>47289900101<br>47289900201<br>47289900202<br>47289900203 |
| 012 | C00042743 | | | 1 x C00141802 | door seal (fridge) 530x1017 p900- | | 47289900000<br>47289900001<br>47289900101 |
| 012 | C00141802 | | | | fridge door seal (530x1017mm) | | 47289900001<br>47289900101<br>47289900201<br>47289900202<br>47289900203 |

5172170 Spare parts list

| Ref. | Code | From | To S/N | Substitute | Description | Notice | Industrial |
|---|---|---|---|---|---|---|---|
| 013 | C00045903 | | | 1 x C00114784 | blanking plug (h.14 d.13,8/9,5) - | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| 013 | C00114784 | | | | blanking plug (h.14 d.13,8/9,5) - | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900202 |
| | | | | | | | 47289900203 |
| 014 | C00053487 | | | 1 x C00141588 | freezer door assy. 541x285x74 - | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| 014 | C00141588 | | | | freezer door assy. 541x285x74 - | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900202 |
| | | | | | | | 47289900203 |
| 015 | C00053499 | | | 1 x C00141804 | door seal (freezer) 530x278 p900 - | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| 015 | C00141804 | | | | door seal (freezer) 530x278 p900 - | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900202 |
| | | | | | | | 47289900203 |
| 016 | C00095537 | | | | name plate ariston - aclass | | |

5212250 Exploded views



5212250 Spare parts list

| Ref. | Code | From | To S/N | Substitute | Description | Notice | Industrial |
|---|---|---|---|---|---|---|---|
| 001 | C00048505 | | | | lamp cover (giugiaro) | | |
| 002 | C00006522 | | | | lamp 15w (e14) | | |
| 002 | C00092584 | | | | protective heat lamp | | |
| 003 | C00066295 | | | | lamp-socket (vossloh) 250v e14 | | |
| 004 | C00007225 | | | | plastic expansion rivet | | |
| 005 | C00009888 | | | | cable clamp | | |
| 006 | C00048507 | | | | thermostat knob giugiaro - | | |
| 007 | C00022048 | | | | blanking plug (10,6mm) - white | | |
| 008 | C00066297 | | | 1 x C00142464 | thermostat box b.27 giugiaro | n1025065 | |
| 009 | C00066294 | | | 1 x C00075585 | lamp switch - n/c (eltek)) | | |
| 010 | C00066296 | | | | push-button light w.110 white | | |
| 011 | C00002516 | | | | nut - thermostat(center-post) | | |
| 012 | C00058793 | | | | thermostat (c.post fastex) k59- | | 47289900000 |
| | | | | | | | 47289900001 |
| 012 | C00064591 | | | 1 x C00143906 | thermostat (c.post) 077b-6189 | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900202 |
| | | | | | | | 47289900203 |
| 020 | C00008598 | | | | mains supply cable 3x0,75 | | |
| 020 | C00094418 | | | | stop mains supply cable | | |
| 022 | C00046312 | | | | capacitor fixing plate (750908) | | |
| 023 | C00082372 | | | 1 x C00144807 | starting capacitor 4 mf | | 47289900000 |
| | | | | | | | 47289900202 |
| 023 | C00090222 | | | 1 x C00144815 | capacitor 4mf (ducati) | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| 023 | C00266589 | | | 1 x C00291503 | capacitor ducati 4 mf (m8) p2-uk | | 47289900203 |
| 026 | C00057383 | | | 1 x C00099798 | compr. tecumseh thb1355ys 220- | n1025138 | 47289900203 |
| 026 | C00066260 | | | 1 x C00063278 | compr. tecumseh tw1368ys 220- | | 47289900000 |
| 026 | C00099798 | | | | compr.gvy57aa 220v/50 1/5hp- | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| 026 | C00116906 | | | 1 x C00267545 | compressor thg1355mks 220- | | 47289900202 |
| 027 | C00032453 | | | | rubber shock absorber - | | |
| 028 | C00008471 | | | 1 x C00193590 | fixing plate - compressor (750908) | | |

5212250 Spare parts list

| Ref. | Code | From | To S/N | Substitute | Description | Notice | Industrial |
|---|---|---|---|---|---|---|---|
| 029 | C00043734 | | | | plate clamp - 80x22 compressor | | |
| 030 | C00042354 | | | | charging pipe 6x90 mm r134a | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900203 |
| 031 | C00046376 | | | | defrost tray (stick on) 215x148x25 | | |
| 033 | C00042334 | | | 1 x C00266179 | filter gr.12 (d.1,95/d.4 mm) gas | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900203 |
| 033 | C00045265 | | | 1 x C00266179 | filter gr.12 (d.1,95/d.4 mm) gas | | 47289900202 |
| 034 | C00037341 | | | | anti vibration rubber bush | | |
| 035 | C00017827 | | | | condenser (h=800x535) | | 47289900000 |
| | | | | | | | 47289900001 |
| | | | | | | | 47289900101 |
| | | | | | | | 47289900201 |
| | | | | | | | 47289900202 |
| 035 | C00195630 | | | | condenser (h=810x530) | | 47289900203 |

# Notices

## 0521123: SEALS FOR DOORS FOAMED AS ONE PIECE

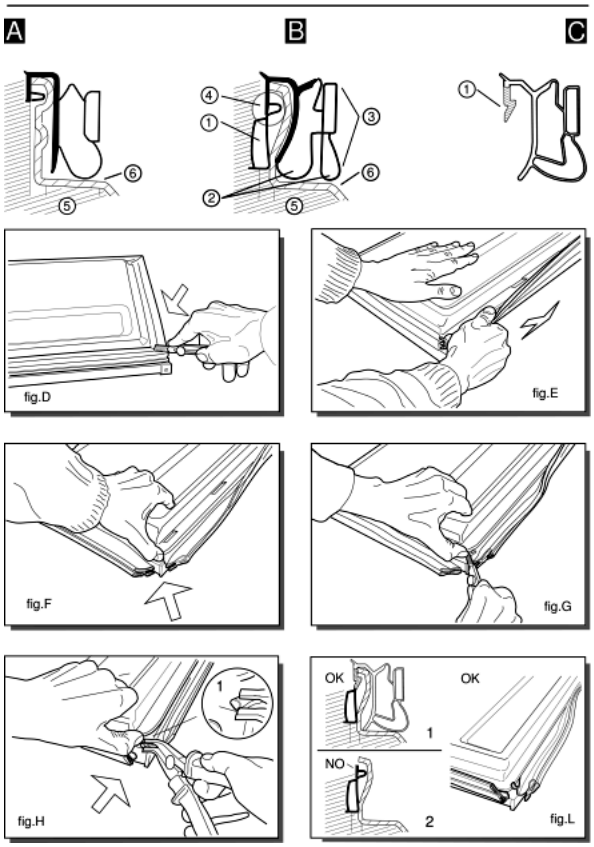
---

Various types of gaskets with different profile, as shown in figures (A) and (B), are used to fix the door (fig. A-5; B-5) and the inner door (fig. A-6; B-6) on the block foamed doors of combined freezers and refrigerators.
---Ilpea profile 245; 179; 412 (fig.A)
---Ilpea profile 287 (fig.B)
When replacing gaskets with profiles 245; 179; 412 these are fixed with screws (2 per corner) to the door.
Gaskets with profile 287 can not be used as spare parts but are designed to house the Ilpea type 900 gaskets (see figure C).
When replacing the gasket (287), once it is removed you will find a pocket (fig. B-1) between the door and inner door.
The rigid tooth (fig.C-1) of the gasket (900) is inserted inside between the pocket and the inner door, doing away with the need for screws.
Gasket with profile 287 is easy to identify since it has an exterior double edge (fig.B-2) which acts as a cushion when the door is closed.
To replace this gasket, follow these steps:
---Dismount the door and cut the four corners of the gasket along the joint (fig.D);
---lift the gasket and pull it carefully along its full length without tearing it (fig.E).
The purpose here is to detach the inner door slightly from the foam along the exterior edge for a depth equal to that of the gasket (fig.B-3);
---lift the corner of the inner door slightly, prising it up with your thumb (fig.F). Do not use a tool which might break the inner door;
---continue cutting the gasket inside the inner door for about 6 mm (fig.G);
---push in the tip of the pliers (type USAG N131) and pull outwards until you see the top edge of the pocket (fig. B-4) which is empty (fig.H-1);
---if you carry out this operation correctly (fig.L) you will be able to pull off the top edge of the pocket for the full length of the door.
If the gasket tears before the top edge (fig. L-2) you should repeat this operation from the other corner of the door.
---once the gasket (287), has been removed the space above the pocket (fig. L-1) can house the rigid tooth (fig. C-1) of the gasket 900.
When you fit this gasket ensure that it lies flush against the edge for the full length of the door.
If the rigid tooth is difficult to fit, eliminate any residues of foam between the door and the inner door in the gasket area.
fig.5131549A

## n1025065: Giugiaro-Vossloh thermostat box kit (low Ambient Temp. +16?C)

---

As of February-2001 (serial no. 10201.0001), the "thermostat box KIT for low ambient temperatures" is being handled with part number 076283 and is to be used on Indesit brand double-door refrigerators that have the Giugiaro thermostat box fitted on them




(048503 - 066297).
The kit should be used exclusively to solve those problems obtained due to the poor performance of the freezer due to an ambient temperature below +16°C.
The kit is innovative, as it has a 6.6 Watt resistance fitted inside the thermostat box that should be activated by the toggle switch with a rubber protection situated underneath the thermostat knob. The switch is activated when the ambient temperature drops below +13°C (contacts closed. See the wiring diagram included in the kit).
This resistance heats up and enables the thermostat to be reactivated, thereby allowing the appliance to operate correctly.
On the thermostat box, the resistance is glued onto an aluminium plate (152x42) itself glued to the box.
When replacing the thermostat box, no components should be re-used, and this includes the wiring.
The wiring in the kit has terminals with fastons for connecting them to the compressor's terminal board; in the event of different solutions, then make the suitable adjustments as necessary.
Moreover, the thermostat box in the kit was obtained from the Giugiaro one (066229) with the Vossloh lamp holder and the Eltek switch. On this box, the position of the fixing hole was moved 15 mm up; therefore, on the models that are fitted with the Giugiaro thermostat box (048503), the hole on the cabinet should be remade before mounting the kit.
Moreover, on the models that use the hidden bulb thermostats, the position of the mark should be remade on the thermostat in the kit and, if necessary, the sheath protecting the bulb should be removed.

This is a list of the parts that make up the kit that are handled as spare parts:

New parts

066295 - LAMP HOLDER (VOSSLOH) 250V E14
066296 - GIUGIARO-VOSSLOH WHITE SWITCH ROD (L.110)
066294 - LIGHT SWITCH 250V NC (ELTEK)
048507 - WHITE-BLUE GIUGIARO THERMOSTAT KNOB
039131 - A13-0184/091X6483 CENTER POST THERMOSTAT
009888 - CABLE CLAMP
006522 - 220-240V/15W LAMP (E14)
048505 - LAMP COVER (GIUGIARO)
076442 - 6.5/7.7 W 220/240V RESISTANCE (FASTON)
032399 - TOGGLE SWITCH PROTECTION (21X15)
032395 - TOGGLE SWITCH 250V S.A1 (21X15)

## n1025101: Disappearing bulb thermostats (warning!)

---

The apparatus that provide for the thermostat to be threaded into a small tube located inside the fridge cabinet are noted as versions with "disappearing bulbs".
The bulb must be inserted for a length equal to the position indicated on the colored ribbon (small mark) which confirms the correct position of the bulb in the evaporation area, otherwise causing the poor performance of the apparatus.
Therefore in cases of thermostat replacement it will be necessary to reset on the new, if missing, the same small mark position and always check that the thermostat bulb is completely devoid of the sheath so as to ease its insertion.
The entrance of the small tube, placed in the thermostat container, is protected by a perforation cover in order to avoid the formation of condensation. The perforation cover was initially situated externally and could be substituted with putty or silicone.
For the models with disappearing bulb thermostats, the spare parts are inclusive of the small colored marker,
however check that its position corresponds to that on the thermostat that will be replaced.
The spare part description always notes the position of the small marker in millimeters as well as the thermostat initials.

Example : 074519 = THERMOSTAT A13-0547 C. POST FASTEX (L.390)

## n1025156: Production of Ariston 2-door width 55 refrigerators (2005 restyling)Polar White

---

In October 2005, the Carinaro factory started producing Ariston refrigerators (width 55 cm) in the new "polar white" colour in place of white-27
The industrial code of these models has changed (see example), whereas the initials (MTA241) and commercial code (28990) have remained the same.
(e.g. 47/28990.0001 = MTA241 white-27 / 47/28990.0201= MTA241 (polar white)

The colour change affects the following structural and external appearance parts only:

-Body, body control panel.
-Central hinge, hole plug
-Doors, magnetic seals, bushings.

All internal accessories (racks, profiles, drawers, etc.) and door accessories (door shelves, egg trays, boxes, etc.) have remained the same.

NB- When you order a spare part, please pay attention to the industrial code.
Given below is the list of Polar White models:

47289940102 = MT241 PO
47289920102 = MTB241
47289900201 = MTA241
47303170101 = MT260

## n1025158: New central hinge for Ariston-55  2-door 240 litre refrigerators (Carinaro).

---

From serial no. 60123.0001, the Carinaro factory has modified the body of 240 litre refrigerators by introducing a new central hinge (see figure N1025058 Fig.1) attached to the side panel.
This hinge is still reversible but cannot be fitted on premodification models where the hinge was attached to the central trim of the refrigerator body (see Figure N1025058fig2).
When changing the door opening from right to left, the new hinge does not need to be inverted like the previous one, just moved to the left side.
To secure it, a hole must be made on the left side of the refrigerator body (see figure N1025058fig3).

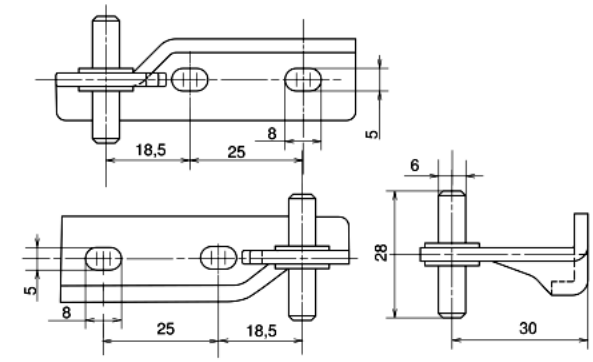
Parts affected

141794 - POLAR WHITE CENTRAL HINGE (CARINARO)
142756 - POLAR WHITE CENTRAL HINGE (MANISA)
142756 - CHROME-PLATED CENTRAL HINGE

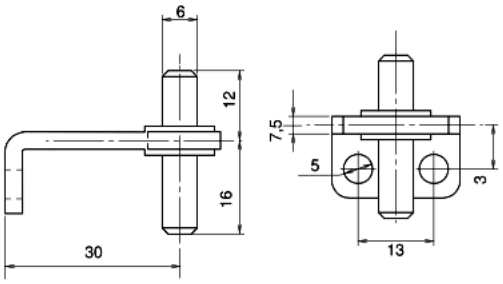
Parts replaced

053838 - CHROME-PLATED CENTRAL HINGE
053478 - WHITE CENTRAL HINGE
114624 - POLAR WHITE CENTRAL HINGE

OLD 053838 - 053478 - 114624

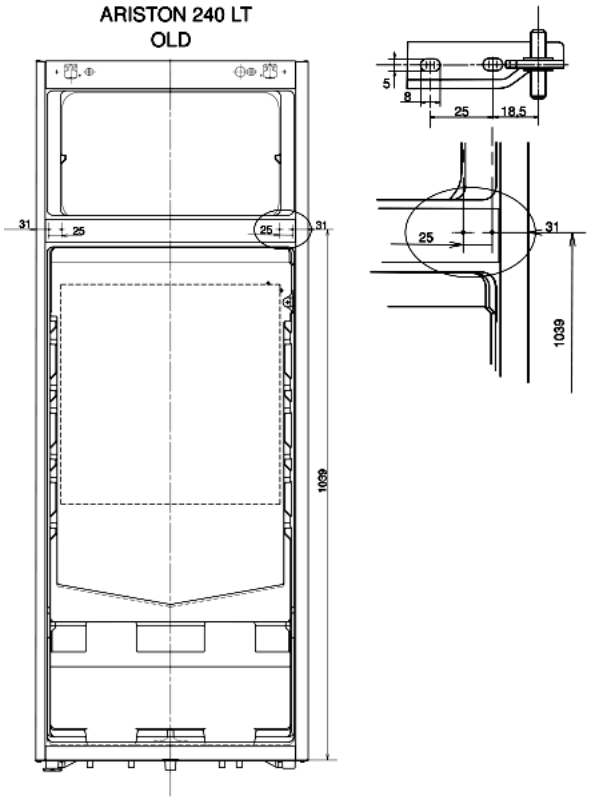



NEW 141794 - 142760 - 142756




N1025158FIG1

ARISTON 240 LT
OLD

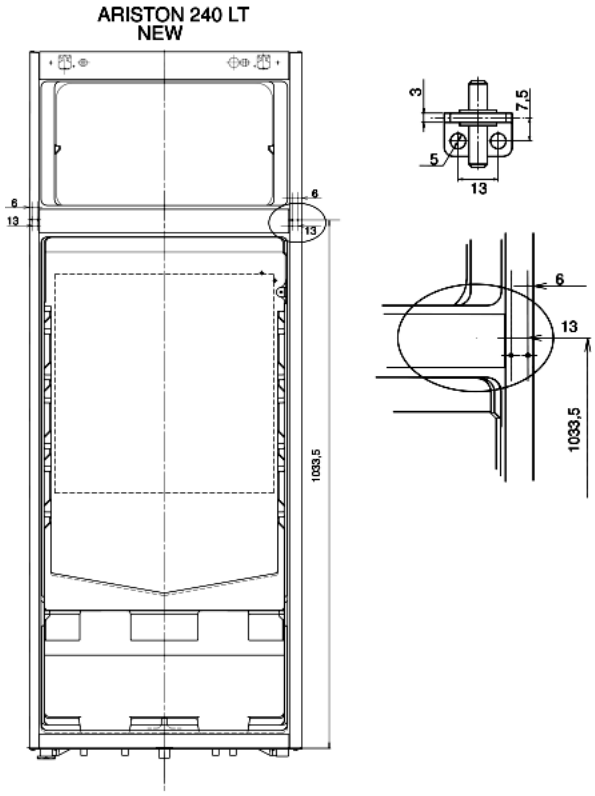



n1025158FIG2

n1025160: Elimination of screen printing on crisper front

---

From serial no. 60515.0001(May-2006) the front screen printing has been eliminated from the crispers of 55 cm wide




N1025158FIG3

refrigerators produced in Carinaro.
With this modification, in order to simplify crisper replacement, the parts introduced will be managed complete instead of with separate crisper and front panel.

New parts (crisper kit)

0144897 - KIT WHITE CRISPER/44 LXH 460X184X156
0144899 - KIT CRISPER PW LXH 460X184X156
0144901 - KIT CRISPER PW LXH 460X184X206
0144903 - KIT CRISPER PW/44 LXH 460X184X206

Parts replaced

086596 - TRANSPARENT CRISPER FRONT 460X155
087298 - WHITE CRISPER FRONT 460X155

## n2510i00: ADJUSTABLE FOOT CHANGED

---

Dimensions of the foot and its hole for fixing screw are changed to improve sytability of the product.

## n2511b03: COLOR CHANGE BUTTER BOX AND COVER

---

Only transparent will be managed

## n2511k01: ICE TRAY STANDARDIZATION

---

Ice tray has been standardized in order to manage only 12cubes version.

## n3010j01: Colour Change of Internal Accessories

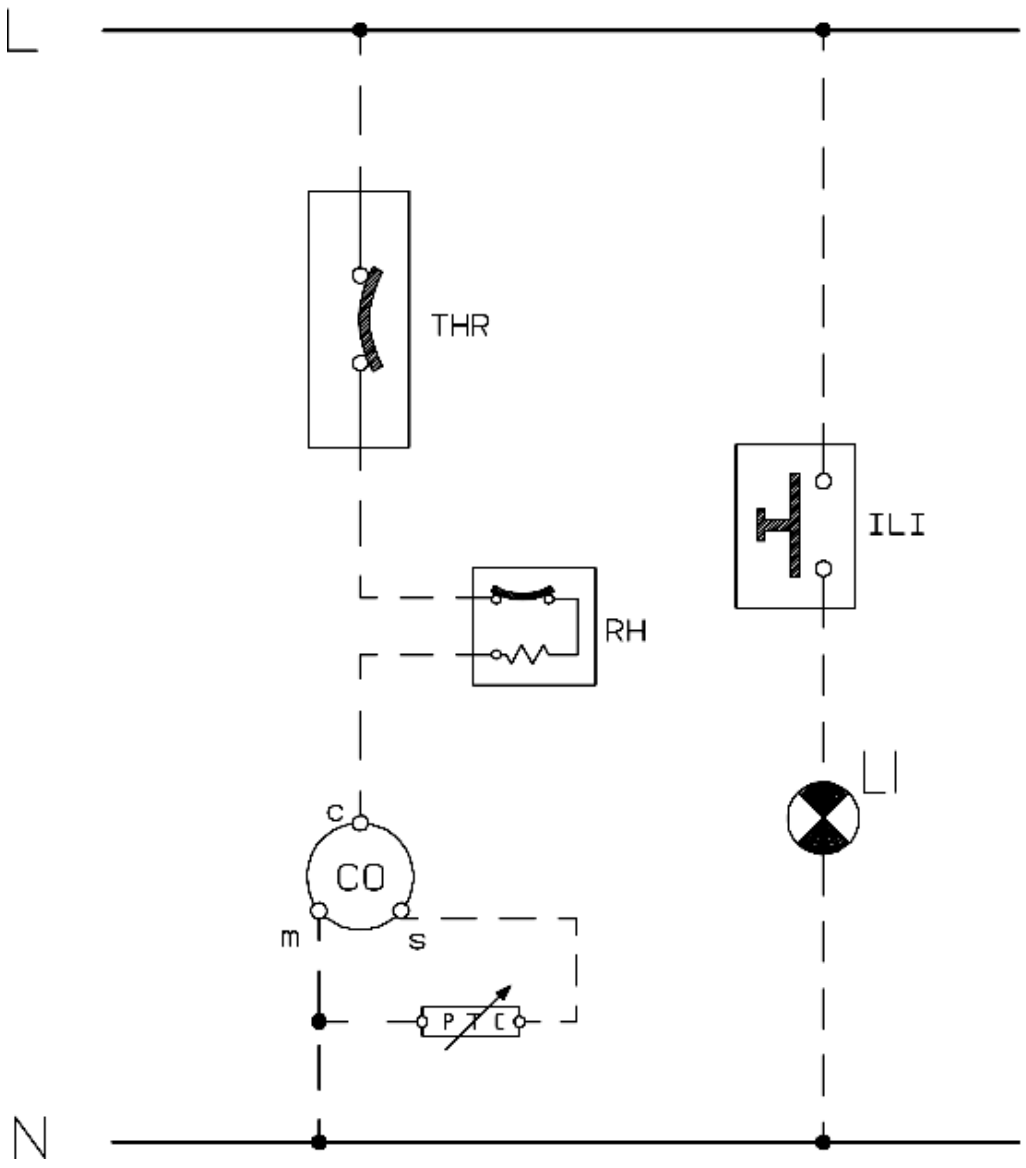
---

The colour of some of the internal shelves and accessories have changed to transparent. This affects models produced in Carinaro-Manisa. Modification is functionally interchangeable therefore once the colour versions of the parts have depleted they will automatically substitute to its corresponding transparent parts. Some parts will have been made obsolete with no substitution.

Some parts have changed from Satin Finish to Shiny (Crystal) Finish. These parts include;
-Door Shelves
-Crisper Front Panels
-Freezer Drawer Front Panels
All pre-modification components will be managed till the end of stock and after they will be substituted with new version.

Electric schemes and links

Cod. 513003b



# Legend

Legend: 513003b

| | | | |
|---|---|---|---|
| CM | Running capacitor | N | Neutral |
| CO | Compressor | PTC | PTC relay |
| FA | Radio anti-trouble filter | R | Heating resistance |
| IDS | Schackler with warning | RA | Ammetrical relay |
| ILFR | Push-button for fridge lamp/fan | RAN | Heating element condensation |
| ILFZ | Push-button for freezer lamp/fan | RFZ | Heating element condensation freezer |
| ILI | Lamp switch | RH | Thermal relay |
| IP | Door switch | RS | Defrosting resistance |
| IR | Line switch | RS1 | Defrosting resistance no-frost evaporator |
| ISC | Warning light-freezing switch | RS2 | Defrosting resistance no-frost gutter |
| IV | Fan-motor switch | SDC | CONTROL CARD DIAGRAM |
| L | Line | SL | Line warning |
| LFR | Fridge lamp | SND1 | PROBE REFRIGERATOR EVAP. |
| LFZ | Freezer lamp | SND2 | AIR-PROBE FREEZER |
| LI | Lighting lamp | SND3 | AIR-PROBE REFRIGERATOR |
| M | Mass/Eart symbol | T | Erden |
| MO | Terminal board | TC | Turbocooling |
| MT | Timer motor | TF | Fuse-thermic |
| MV | Fan motor | THI | Thermostat switch |
| MVCO | Compressor compartment fan | THR | Adjustable thermostat |