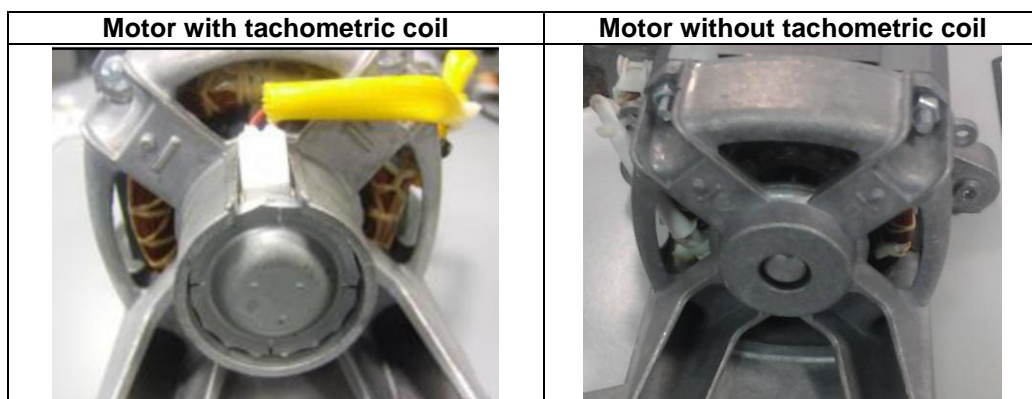


ELIMINATION OF TACHOMETRIC COIL FROM THE MOTORS POWERED WITH INVERTER

From serial number 240....manufacturing has begun at the Porcia plant on appliances with a new motor without tachometric coil (as can be seen in the photos below) and a new INVERTER board assembly with a new software with specific CCF and MCF.

The suffix (ELC) of the Prod. no. on the rating plate has been amended so the change can be identified.



SPARE PARTS NUMBERS

The motor and inverter's new spare parts nos. can be found in the relevant Service Notes.

INTERCHANGEABILITY

The parts cannot be interchanged with the old ones.



Warning:
The wiring connecting the inverter to the motor without tachometric was not changed so there are still five wires (even in the representation of the operating and wiring diagram); this does not mislead the technician into thinking that the motor is faulty because there is no tachometric coil.

MODELS CONCERNED

They are listed in the pages below.

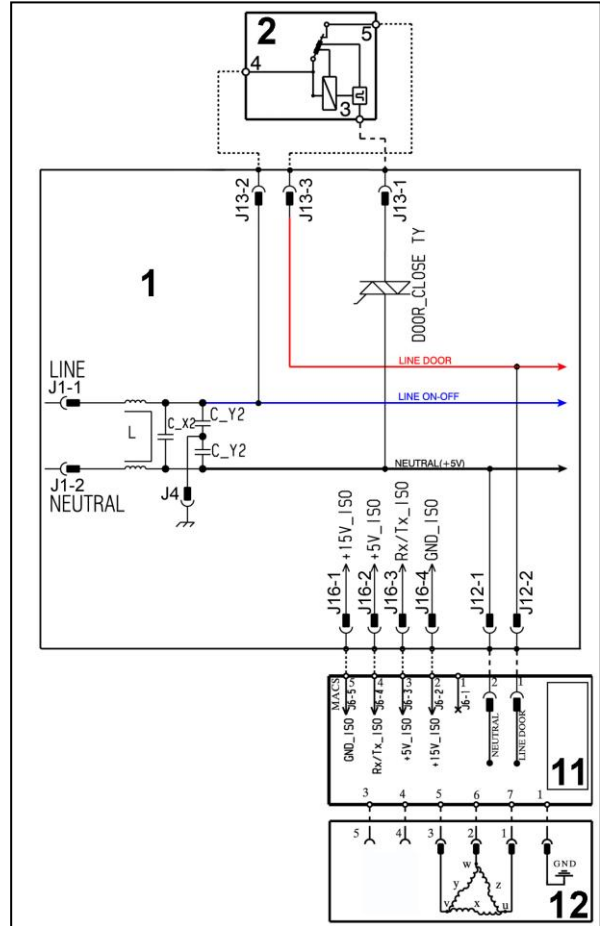
UPDATING THE INFORMATION ON THE MOTOR AND INVERTER

Three-phase asynchronous motor - Inverter

General characteristics

- 1. Main circuit board
- 2. Door safety interlock
- 11. Inverter
- 12. Motor

X-Y-Z = Motor Windings



Power supply to motor

Three-phase power is fed by the inverter (11), which sends through the connectors 5-6-7 the three phases to connectors 1-2-3 on the motor (nodes U-W-V), where the windings (Y-X-Z-) are connected. The phase shift between the phases is 120° and peak amplitude is 310V.

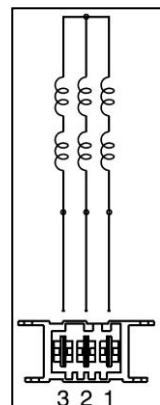
It is possible to get an idea of the efficiency of the motor by measuring the resistance of the coils:

Coil ohm 9.10 ~ ±7% (contacts 2-3)

Coil ohm 9.10 ~ ±7% (contacts 1-2)

Coil ohm 9.10 ~ ±7% (contacts 1-3)

In the event of a fault an alarm will be displayed - see table of alarms.



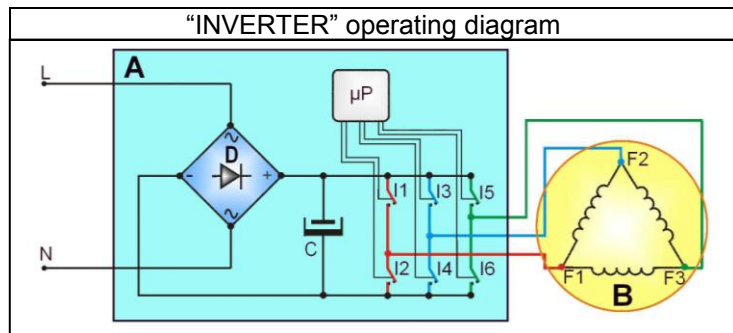
Inverter

General characteristics

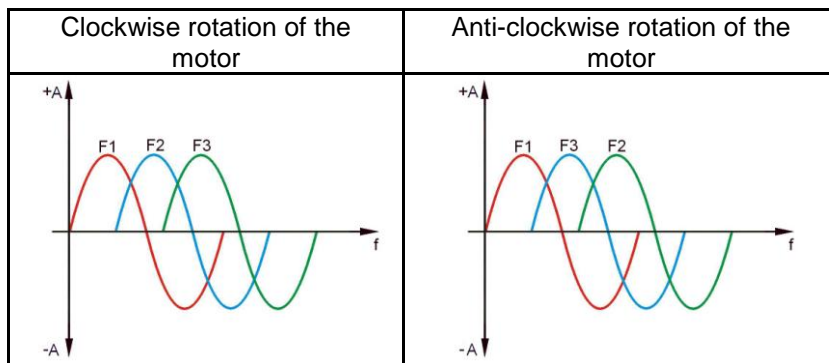
The EWM10931 electronics use a new asynchronous motor, with 2 poles, three-phase, with high performance and low noise levels.



- L = Phase
- N = Neutral
- T IT = "INVERTER" board
- B = Motor
- C = Condenser
- D = Diodes
- I1÷6 = Switches
- F1÷3 = Motor connectors
- μP = Micro Processor



To transform the single-phase electricity (available in our homes) into three-phase electricity, a new circuit board is used (A) to transform the energy from single-phase to three-phase, which can be modulated in breadth and frequency respectively to adjust the power and number of revolutions of the motor. Single-phase electricity (applied to connectors L-N), is rectified by the diode jumper (D), so there is a direct voltage of 310V at the ends of capacitor C, which through the combination of the opening and closing of switches I1-I6 (piloted by the μprocessor) determines the piloting voltage and frequency of the motor.



The motors powered by this inverter do not have tachometric winding. The inverter can detect / adjust the motor speed via the current absorption. During the spin phases, the microprocessor can perform, depending on the software configuration, the anti-foam check, where featured, and the anti-unbalancing check.



- **Any work on electrical appliances must only be carried out by qualified personnel.**
- **Unplug the appliance before accessing internal components.**
- **After disconnecting the plug from the socket, wait about 2 minutes before removing the "INVERTER" plastic cover, thus allowing any condensers to discharge and avoid an electric shock.**

In the event of a fault an alarm will be displayed - see table of alarms.

ALARM UPDATE

Manually: Technical and functional characteristics

Alarm summary table update

E52: DELETED (does not appear on the display)

E52	No signal from motor tachometric generator	Wiring faulty; Motor faulty; Inverter board faulty;	Cycle stops with door locked (after 5 attempts)	ON/OFF RESET
----------------	-------------------------------------------------------	----------------------------------------------------------------	------------------------------------------------------------	-------------------------

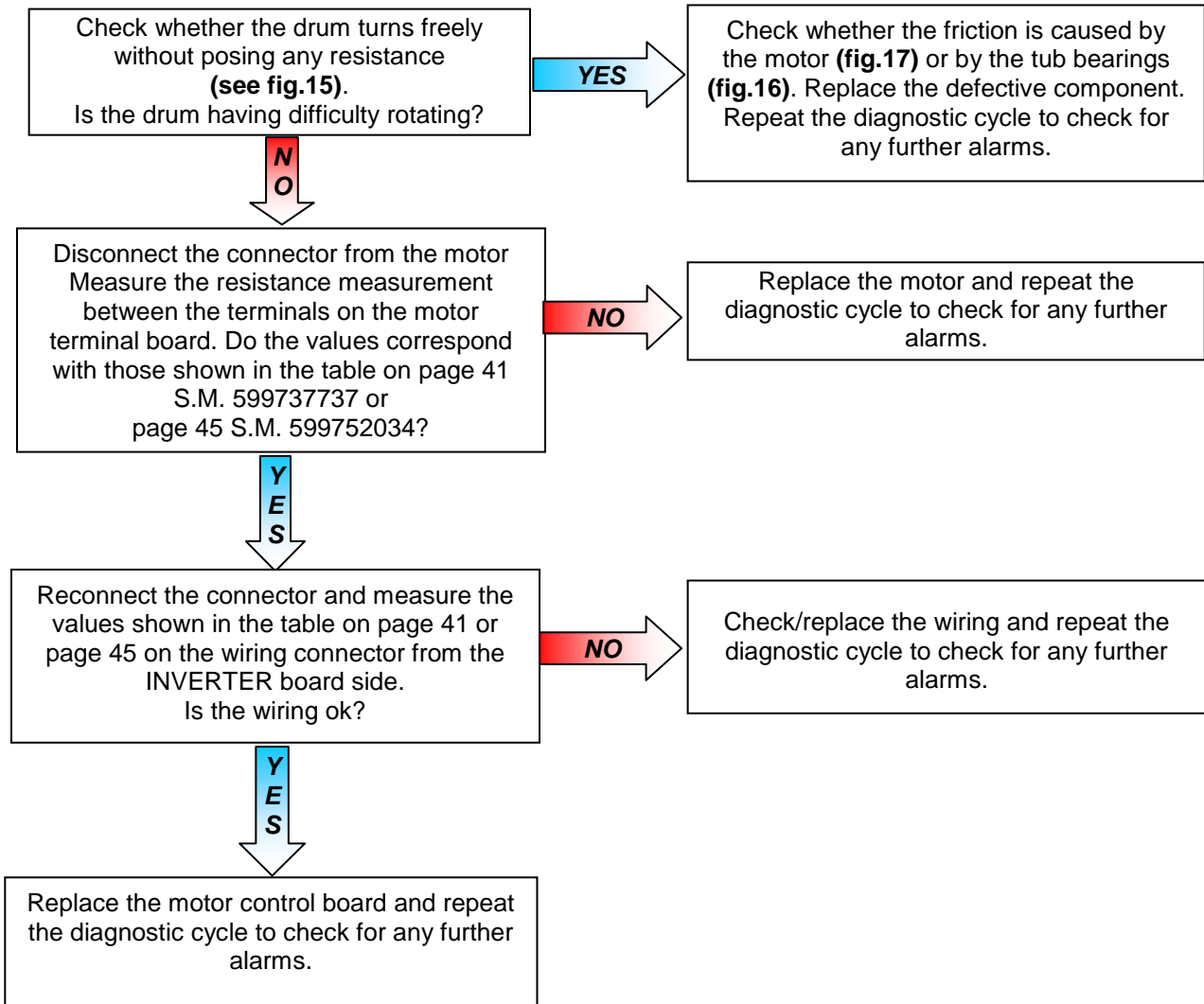
E59: CHANGED

E59	No rotation of the motor	Wiring faulty on inverter for motor; inverter PCB faulty; motor faulty;	Cycle stops with door locked (after 5 attempts)	ON/OFF RESET
-----	--------------------------	-------------------------------------------------------------------------	-------------------------------------------------	--------------

Manually: Guide to diagnostics

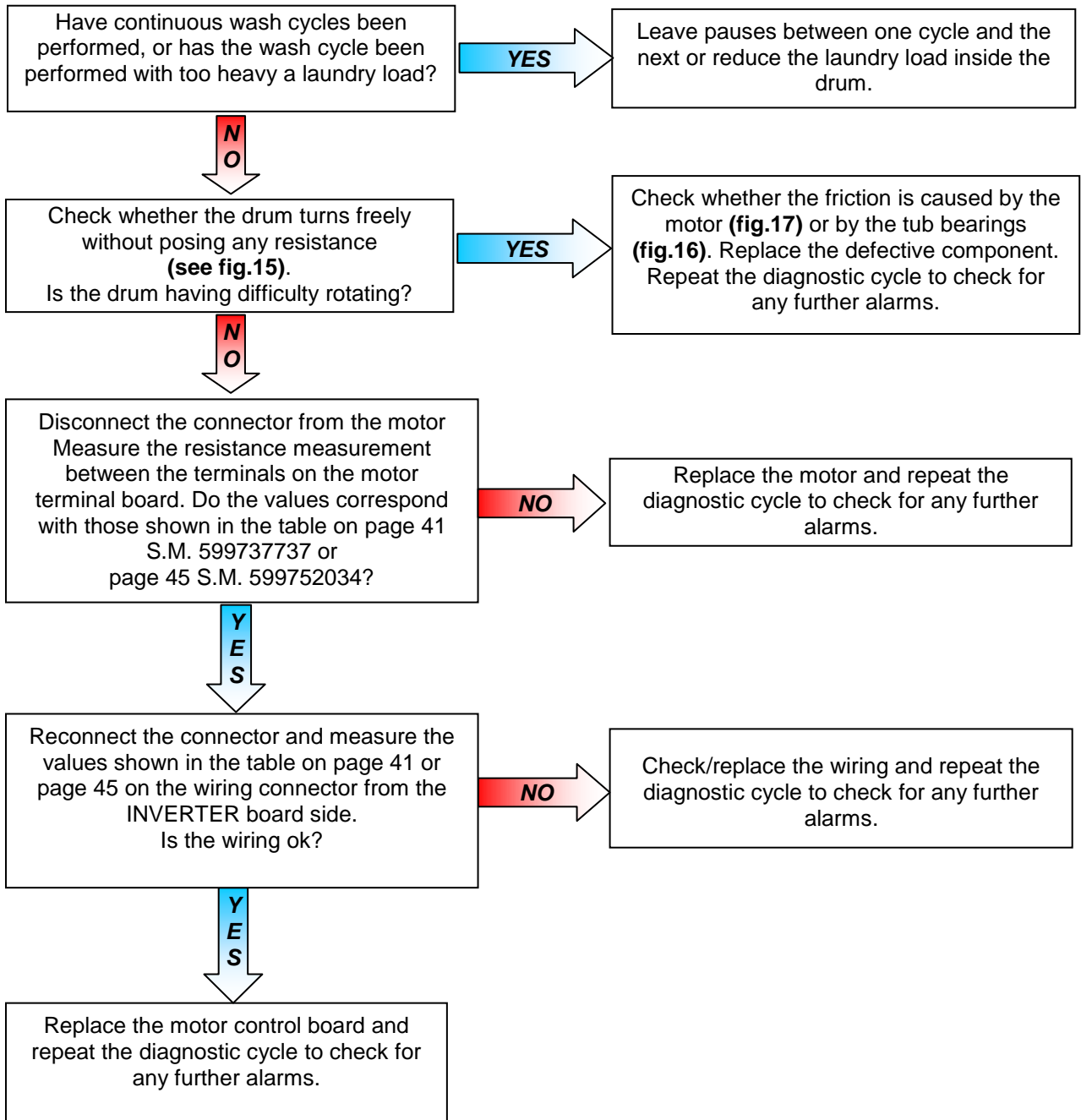
E59	E59: No rotation of the motor	E59
The lack of motor rotation should last at least 3 seconds		

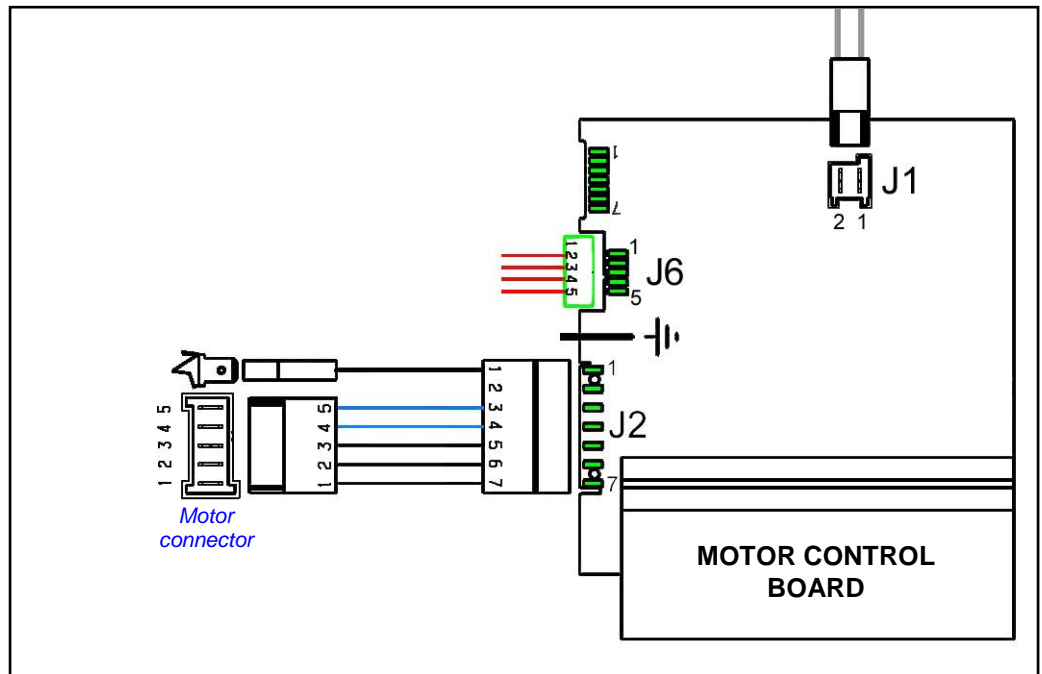
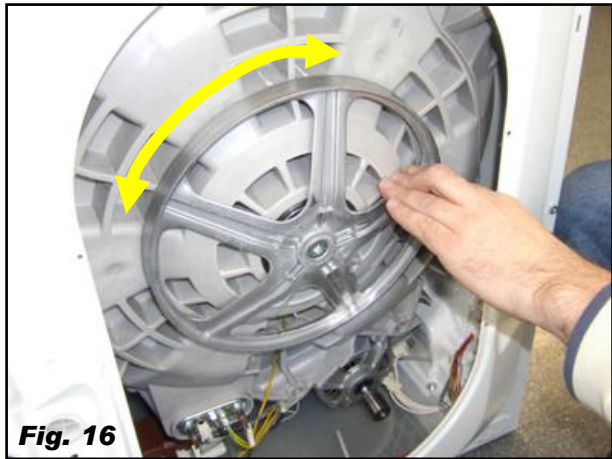
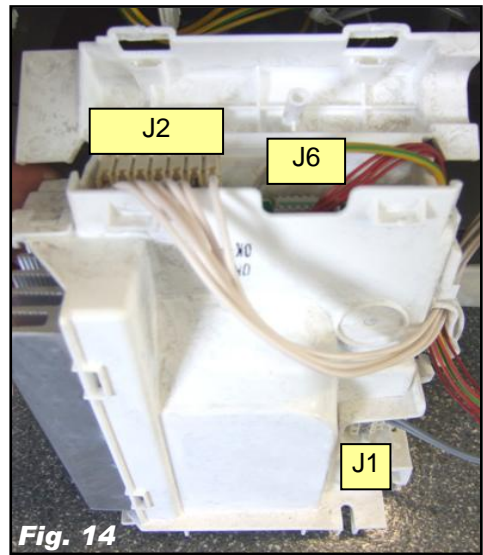
Checks to perform:



E5A	E5A: Overheating on Inverter board heat dissipator	E5A
	The dissipator exceeds a temperature of 88°C	

Checks to perform:





THE MODELS INVOLVED IN THE CHANGE

PNC_ELC	Brand	Model	Pub.
91453100001	AEG	L77484AFL	599758582
91453100201	AEG	L77484AFL	599766127
91453100301	AEG	L77484AFL	599759287
91453100401	AEG	L77484AFL	599758969
91453100501	HV1	QW147385	599758977
91453110003	AEG	L75280FL	599758497
91453110101	AEG	L75675FL	599759509
91453110202	AEG	L75485FL	599758418
91453110602	AEG	L75475FL	599758411
91453110702	AEG	L75475FL	599758420
91453110801	AGL	L75675FL	599758499
91453111102	AEG	L75475FL	599761140
91453111302	AEG	L75485FL	599759750
91453111702	AEG	L75478FL	599759511
91453111903	AGL	L75280FL	599758503
91453112003	AEG	L75280FL	599759003
91453112102	AEG	L75470FL	599759164
91453112202	AEG	L75480FL	599762180
91453112402	AEG	L75480FL	599759230
91453112503	AGL	L75280FL	599758504
91453112602	AEG	L75470FL	599758989
91453112703	AEG	L75270FL	599758939
91453112801	AEG	L75670FL	599758991
91453112903	AEG	L75270FL	599758945
91453113002	AEG	L75480FL	599759231
91453113202	AEG	L75471FL	599759872
91453113403	AGL	L75282FL	599758507
91453113503	AGL	L75283FL	599758509
91453113603	AEG	L75287FL	599760492
91453113702	AEG	L75483FL	599758996
91453114803	AEG	L75286FL	599758997
91453114902	AEG	L75478FL	599759232
91453115001	AEG	L75678FL	599765129
91453115102	AGL	L75472FL	599758510
91453115701	AEG	L75678FL	599762827
91453115901	AEG	LB3460	599759233
91453116001	AEG	LB3660	599759235
91453116403	AEG	L75281FL	599759436
91453116503	AGL	L75282FL	599758511
91453116801	HVA	QW147270	599759876
91453116901	AEG	L75670FL	599759000
91453117001	AEG	L75670FL	599758421
91453117101	HVA	QW167270	599758435
91453117701	AEG	L75680FL	599759243

PNC_ELC	Brand	Model	Pub.
91453118501	AEG	L75680FL	599758961
91453118801	AEG	LP5260	599759874
91453118901	AEG	L75470FL	599759165
91453119001	ELX	WAGL4E200	599758994
91453119101	ELX	WAGL6E200	599758524
91453119201	ELX	WAL4E200	599758525
91453119301	ELX	WAL6E200	599758526
91453119401	ELX	WAL7E200	599758992
91453119501	ELX	WAGL8E200	599760437
91453119701	FRS	WA7425	599759004
91453119801	FRS	WA7445	599758984
91453119901	FRS	WA8465	599758976
91453120002	AEG	L87485FL	599758677
91453120601	AEG	L87685FL	599759521
91453121002	AEG	L87485FL	599763705
91453121101	AEG	L87685FL	599758585
91453121502	AEG	L87490FL	599759751
91453121602	AEG	L87490FL	599758687
91453121702	AEG	L87490FL	599759527
91453121802	AEG	L87490FL	599759288
91453122201	AEG	L87680FL	599759529
91453122401	AEG	L87680FLCS	599759531
91453122502	AEG	L87480FL	599758601
91453122601	AGL	L87680FL	599758527
91453122702	AEG	L87490FL	599758603
91453122901	AEG	LR2660	599759986
91453123001	ELX	WASL2E200	599759012
91453123201	AEG	L87480FL	599765367
91453123501	HVA	QW168480	599759586
91453123801	AEG	L87490FL	599759532
91453124001	AEG	L87680FL	599758691
91453124201	AEG	L88489FL	599758597
91453124301	AEG	L88489FLCS	599766522
91453124401	AEG	L87495FL	599760298
91453124501	AEG	L87483FL	599760772
91453124601	AEG	L87680FL	599759535
91453124701	ELX	WASLEEV200	599758608
91453124901	NOV	WA1668	599759008
91453125001	AEG	L87484EFL	599758694
91453125201	AEG	L88489FLP	599759984
91453125301	AEG	L87680FLP	599760364
91453125601	ELX	WASLEP200	599759013
91453125801	AEG	L87495XFL	599758606
91453125901	AEG	L87495XFL	599760731

PNC_ELC	Brand	Model	Pub.
91453117901	AEG	L75480FL	599763308
91453126101	AEG	L87495XFL	599759536
91453126201	AEG	L87495XFL	599761049
91453126301	AEG	L87495XFL	599760095
91453126401	AEG	L87495XFL	599763799
91453126501	JOL	JLWM1605	599758529
91453126601	AEG	L88489FLC2	599762106
91453126801	AEG	L88489FL2	599766197
91453126901	AEG	L88489FLP2	599763801
91453127001	AEG	L88489FL2	599758607
91453127101	AEG	L88489FL2	599758609
91453127201	AEG	L88689FL2	599759019
91453127301	AEG	L88689FL2	599764712
91453127401	AEG	L88689FL2	599758621
91453127501	AEG	L88689FL2	599758611
91453127601	AEG	L87485FL	599759539
91453128001	AEG	L87484AFL	599762108
91453128201	AEG	L87484AFL	599760729
91453130202	AEG	L98485FL	599758616
91453130301	AEG	L98685FL	599759166
91453130501	AEG	L98685FL	599758953
91453130702	AEG	L98485FL	599761717
91453131301	AEG	L98690FL	599758620
91453131401	AEG	L98690FL	599758695
91453131501	AEG	L98690FL	599760097
91453131801	ELX	WASL3E200	599759169
91453131901	ELX	WASL6E200	599759588
91453133101	HVA	QW168490	599760814
91453133201	AEG	L98699FL	599758622
91453133301	AGL	L98699FL	599758536
91453133401	AEG	L98699FL	599758626
91453133601	AEG	L98695FL	599759590
91453134001	AEG	L98499FL2	599758618
91453134101	AEG	L98499FL2	599760098
91453134201	AEG	L98699FL2	599759171
91453134301	AEG	L98699FL2	599762652
91453134401	AEG	L98699FL2	599763020
91453134501	AEG	L98699FL2	599758946
91453134601	AEG	L98699FL2	599760099
91453134801	AEG	L98699FL2	599758612
91453135001	AEG	L98699FL2	599760100
91453135101	AEG	L98685FLS	599758628
91453135601	HV1	QW169491	599758541
91453140201	AEG	L75470FL	599759244
91453140301	AEG	L75670FL	599759248

PNC_ELC	Brand	Model	Pub.
91453126001	AEG	L87484EFL	599759656
91453140601	ELX	WAGLES7000	599758436
91453140801	ELX	WA1457F	599759438
91453141101	AEG	L75280FLP	599762437
91453141201	AEG	L75270FLP	599759797
91453141301	AEG	L75480VFL	599759657
91453141401	AEG	L7547EXFL	599758619
91453141601	AEG	L75484EFL	599762567
91453141701	AEG	L75670FL	599760528
91453141801	AEG	L75484EFL	599760530
91453141901	AGL	L75484EFL	599758535
91453142001	AEG	L75484EFL	599759439
91453142101	AEG	LP5210	599759754
91453142201	AEG	L75484EFL	599758985
91453142301	AEG	L75680FL	599760362
91453142501	AEG	L75280VFL	599762938
91453142601	AEG	L75470FL	599758423
91453142901	AEG	L75672FL	599759512
91453143001	AEG	L75672FL	599758962
91453143101	AEG	L76489FL	599762855
91453143201	AEG	L76689FL	599760233
91453143301	AEG	L76485FL	599758943
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91453144201	AEG	L76485FL	599758424
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91453145201	AEG	L76488FL	599758425
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91453145401	AEG	L76482FL	599761821
91453145501	AEG	L75480FL	599758426
91453145601	AEG	L75481FL	599758983
91453145901	AEG	L7648EXFL	599758533
91453147501	AEG	L76487FL	599758534

PNC_ELC	Brand	Model	Pub.
91453140401	AGL	LB3470N	599758542
91453141001	AEG	L75470FLP	599762182

PNC_ELC	Brand	Model	Pub.
91453150001	JOL	JLWM1411	599758437

REVISIONS:

Revision	Date	Description	Author	Approved by
00	0X/201X	Document Creation	DMM	XX – 0X/201X