9. Details of the Authority's Procurement Manager

Name: Address:			
Tel: Email:			

10. Service Provider's Key Personnel:

Name & Position	Contact Details	Area of Responsibility
		Projects
		Engineering/ Projects
		Sales

11. Notice period in accordance with Clause 26.4 (termination without cause):

90 days Notice Period in accordance with Clause 26.4 termination without cause

12. Address for service of notices and other documents in accordance with Clause 35:

For the Authority:

London Trams 11th Floor, Knollys House 17 Addiscombe Road Croydon CR0 6SR

For the attention of: Contracts Manager

For the Service Provider:



- 13. Office facilities to be provided to the Service Provider in accordance with Clause 11.3: Only those as detailed within the Specification
- 14. Training to be provided by the Service Provider in accordance with Clause 8.8: None

SECTION 3

SCHEDULE 2 - SPECIAL CONDITIONS OF CONTRACT

S1 Order of Precedence

The special conditions of contract of this Schedule 2 take precedence over the contract provisions of the main contract. In the event of any conflict between the provisions of Schedule 2 and the provisions of the main contract the provisions of Schedule 2 shall prevail.

A5 Liquidated Damages

For the purposes of this Clause A5, unless the context indicates otherwise, the following expression shall have the following meaning:

"Required Date" subject to any extension of time granted by the Authority to the Service Provider in accordance with this Contract, the date or dates on or by which each Milestone is required to be completed as set out in the TfL Croydon Tram - Project Plan (latest version) or, in the absence of any Milestones, the date or dates on or by which the Services are required to be provided as set out in the latest programme plan agreed by London Trams Project Manager.

A5.1 The Service Provider shall provide the Services (including each Milestone) on or by (as the case may be) the Required Date.

A5.2 Without prejudice to the Authority's other rights, powers or remedies (including termination) if the Service Provider fails to comply with Clause A5.1, it shall pay to the Authority on demand £150 (one hundred and fifty pounds Sterling) per working day capped at a maximum of 5 days per delay event. It is agreed that Liquidated Damages shall not be applied to any delay incurred, up to 1 week, on the first overhauled component for each overhaul facility (as referenced within Schedule 5 – The Project Plan).

A5.2.1 the date on or by which the Services are actually performed or provided or such Milestone is actually completed (as the case may be) in accordance with the Contract; and

A5.2.2 if the Authority has terminated the Contract under Clause 26, the date of such termination.

A5.2.3 An agreed stock of Arising Work / Missing and Damage material will be ordered at contract commencement, against quoted lead times. It is agreed by both parties that any delay incurred as a result of waiting delivery of these parts within the stated delivery lead time shall be excluded from any liquidated damages. The parties will ensure that this stock is replenished at agreed intervals.

A5.3 All sums payable by the Service Provider to the Authority pursuant to Clause A5.2 shall be paid as liquidated damages for delay and not as a penalty and the Parties acknowledge that such amounts are a genuine pre-estimate of the loss that may be suffered by the Authority in the event of any such failure of the Service Provider to comply with Clause A5.1

A5.4 The total amount payable to the Authority through Clause A5 is capped at a total of 5% of the total of the prices of the Contract.

A5.5 Should the Service Provider fail to meet the Required Date and Clause A5.2 is activated, the Service Provider will provide to the Authority promptly within 2 business days an updated Programme to reflect the impact of the delay to the remaining programme.

A6 Extension of Time

- A6.1 If in the reasonable opinion of the Service Provider delay in provision or completion of the Services (including any Milestone) has been caused or is likely to be caused by reason of:
 - A6.1.1 any material breach of the Contract by the Authority; and/or
 - A6.1.2 any variation of the Contract under Clause 31; and/or
 - A6.1.3 the occurrence of any Force Majeure Event affecting the Service Provider; and/or
 - A6.1.4 any other special circumstances of any kind whatsoever outside the reasonable control of, and which could not reasonably have been foreseen by, an experienced contractor providing services the same as or similar in all material respects to the Services but excluding any strikes, lock-outs or other industrial disputes of the Service Provider's workforce,
 - A6.1.5 Any delay in the opening of the new Birkenhead overhaul facility (which is still going through business case approval at time of contract signature). If in the event that the Birkenhead facility either does not open or opens later than indicated on the Project Plan, the parties shall agree a revised Project Plan whereby the overhaul program is continued at the overseas facility with 4 weekly turnaround time per component.

then the Service Provider shall as soon as reasonably practicable, and in any event within 5 Business Days after the cause of any delay has arisen, give written notice to the Contract Manager of the actual or foreseen delay and any claim for an extension of time for the completion of the Services or any Milestone. Subject to Clause A6.2, if the Authority is satisfied that the delay is or would be justified by reason of one of the events specified in Clause A6.1, then the Authority shall extend the time for the completion of the Services (or part of them) by such reasonable time period (either prospectively or retrospectively) as the Authority may determine. Any extended period or periods for the completion of the Services or any Milestone shall be subject to regular review provided that no such review shall result in a decrease in any extension of time already granted by the Authority unless the circumstances surrounding the delay have changed such that a decrease is reasonable and the Parties, acting reasonably, have agreed to a decrease in the extension of time previously granted.

A6.2 It is a condition precedent to the grant of an extension of time under Clause A6.1 that the Service Provider has given written notice to the Contract Manager of the actual or foreseen delay as required under Clause A6.1 and has used all reasonable endeavours to overcome, avoid or minimise the effects of any occurrence causing delay.

A6.3 Any extension of time granted under Clause A6.1 shall be reduced proportionately as the Authority may determine to the extent that any default, including any neglect on the part of the Service Provider or the Service Provider's Personnel may have contributed to the delay.

A8 FURTHER INTELLECTUAL PROPERTY REQUIREMENTS

- A8.1 The Service Provider shall ensure that all the Service Provider's Personnel performing the Services (or part of them) contract with the Service Provider that any Intellectual Property Rights arising out of or relating to work done by those persons pursuant to the Contract shall be assigned with full title guarantee to the Authority and that those persons shall have no title, rights or interests whether legal or beneficial in any of such Intellectual Property Rights and, in relation to any copyright work created, that all moral rights shall be waived by the creator.
- A8.2 If, and to the extent that, the Products consist of or include copyright work authored by the Service Provider or any other person, being work not prepared or developed for the purposes of the Contract, then, notwithstanding Clause 21.1, title to the copyright in such work shall not vest in the Authority.
- A8.3 The Service Provider grants or undertakes to procure the grant to the Authority free of charge of a perpetual, irrevocable, transferable, world-wide and royalty-free licence to reproduce and to use any work of the type referred to in Clause A8.2 and every part of it in any manner.
- A8.4 As between the Authority and the Service Provider, Intellectual Property Rights in all documentation and other items supplied by the Authority to the Service Provider in connection with the Contract shall remain the property of the Authority.
- A8.5 The Authority grants to the Service Provider a non-exclusive, nontransferable licence to use all the Intellectual Property Rights owned (or capable of being so licensed) by the Authority required by the Service Provider or any of the Service Provider's Personnel to provide the Services. Any such licence is granted for the Term solely to enable the Service Provider to comply with its obligations under the Contract.

A9 Infringement of Intellectual Property Rights

A9.1 The Service Provider shall:

A9. 1.1 promptly notify the Authority upon becoming aware of an infringement or alleged infringement or potential infringement of any Intellectual Property Right which affects or may affect the provision or receipt of the Services or if any claim or demand is made or action brought for infringement or alleged infringement of any Intellectual Property Right and;

A9.1.2 indemnify, keep indemnified and hold harmless the Authority from and against all actions, claims, demands, costs, charges or expenses (including legal costs on a full indemnity basis) that arise from or are incurred by the Authority by reason of any infringement or alleged infringement of any Intellectual Property Rights of any person arising out of the use by the Authority of the Products (or any of them) or anything arising from the provision of the Services and from and against all costs and damages of any kind which the Authority may incur in or in connection with any actual or threatened proceedings before any court or arbitrator.

A9.2 The Authority shall, at the request of the Service Provider, give the Service Provider all reasonable assistance for the purpose of the Service Provider contesting any such claim, demand, or action referred to in Clause A9.1.1and the Service Provider shall:

A9.2.1 reimburse the Authority for all costs and expenses (including legal costs) incurred in doing so;

A9.2.2 conduct at its own expense all litigation and/or negotiations (if any) arising from such claim, demand or action; and

A9.2.3 consult with the Authority in respect of the conduct of any claim, demand or action and keep the Authority regularly and fully informed as to the progress of such claim, demand or action.

A9.3 If a claim or demand is made or action brought to which Clause A9. 1 applies or in the reasonable opinion of the Service Provider is likely to be made or brought, the Service Provider may, after consultation with the Authority, at its own expense and within a reasonable time, modify or substitute any or all of the Products (as defined in Clause 21.1) so as to avoid the infringement or the alleged infringement, provided that the terms of the Contract shall apply mutatis mutandis to such modified or substituted Products and such Products are accepted by the Authority.

A16 Step-in

A 16.1 If the Authority reasonably believes that it needs to take action in connection with the Services:

A16.1.1 because a serious risk exists to the health or safety of persons or property or to the environment; and/or

A16.1.2 to discharge a statutory duty, then the following provisions shall apply.

A16.2 The Authority shall provide notice to the Service Provider in writing of the following:

A 16.2.1 the action it wishes to take; A16.2.2 the reason for such action;

A 16.2.3 the date it wishes to commence such action;

A16.2.4 the time period which it believes will be necessary for such action; and

A 16.2.5 to the extent practicable, the effect on the Service Provider and its obligations to provide the Services during the period such action is being taken.

A 16.3 Following service of the notice required in Clause 16.2, the Authority or a third party appointed by the Authority for the purpose shall take such action as is notified under these provisions and any consequential additional action as the Authority reasonably believes is necessary (the "Required Action") and the Service Provider shall give all reasonable assistance to the Authority or such third party while it is taking such Required Action (such assistance to be at the expense of the Authority).

A 16.4 For so long as and to the extent that the Required Action is taken, and this prevents the Service Provider from providing any part of the Services, the Service Provider shall be relieved from its obligations to provide such part of the Services and the Authority shall not be liable to pay Charges for such part of the Services (except to the extent that the Authority shall pay the Service Provider for the assistance it provides in accordance with Clause A16.3).

A17 Adjustment to Charges (Indexation)

A17.2 In relation to the core overhaul work scope, including mandatory and change on condition parts included within core price, on and with effect from the first anniversary of the Service Commencement Date, the Charges shall be adjusted upwards by 1.5% (this includes both labour and material).

A17.3 In relation to the Arising Work / Missing and Damage (M&D) material that is excluded from core scope, the price will remain valid for full program duration.

51 Liability

S1.1 The Service Provider's liability for indirect and consequential loss and/or loss of profit is limited to a total of **nil**.

S1.2 The Service Provider's total aggregate liability to the Authority in respect of this contract and the subject matter hereof (other than in respect of death or personal injury or agreed Liquidated Damages or other excluded matters shall be capped at 100% of the aggregate Contract price.

S2 Sale of Goods Act 1979 and Supply of Goods and Services Act 1982 (as amended):

S2.1 The warranties implied by the Sale of Goods Act 1979 and/or the Supply of Goods and Services Act 1982 and/or any reference to or incorporation of the same shall to the fullest extent permitted by law not apply to this contract.

Clause 26.4 termination without cause, programme materials that have been procured by the Service Provider to directly perform the overhauls would be purchased by London Trams should Clause 26.4 be activated.

SECTION 4

SCHEDULE 3 – SPECIFICATION

1. Background

The CR4000 Hydraulic Power Unit (HPU) Graduable, auxiliary HPU and trailer brake caliper overhauls are scheduled at 600 000 KM in the maintenance plan.

2. INTRODUCTION

This document defines the scope of the overhaul of the Croydon tram brake system. The individual components will be overhauled in line with recommended procedures and brought back to as new performance specification; each item is considered in sections 5.

3. BRAKE SYSTEM DESCRIPTION

The brake system is composed of the following components:

- (1) Reverse hydraulic caliper
- (2) adjustable Hydraulic Power Unit
- (3) Two-step HPU
- (4) Back-up HPU
- (5) Brake release valves
- (6) Brake Control Unit



The global system used in London tram is described below.

The traction equipment at each extremity controls the brakes of motor bogie via the 2-steps HPU. One Brake Control Unit controls the brake of the trailer bogie via the adjustable HPU. There are four (4) reverse saddle calipers per trailer bogie and two (2) reverse calipers per bogie motor. The assistance HPU allows the release of the brake if the main HPU Graduable has failed.



4. SCOPE OF WORK

The full scope of equipment for this project is in the follow table. The quantity is given per tram and components will be overhauled to the OEM specification as described below:

Description	OEM Part Number	Quantity	
Adjustable HPU (Graduable)	122546	1	
Assistance HPU (auxiliary)	120264	1	
Trailer Caliper left	4F 122483	2	
Trailer Caliper right	4F 122482	2	

5. Overhaul procedures

Components	COI Procedures E 3565	
Graduable / Adjustable HPU		
Assistance HPU	E 3506	
Trailer Caliper	E 3566	

5.1 Outstanding modification (equipment upgrades HPUs)

The checking replacement of the brushes of the electrical motor is made periodically. Which required the operator to disassemble the unit (open the cover, remove the manifold etc.). It was requested to propose an easy access to the electrical motor which would facilitate the replacement of the brushes without major disassembly of the equipment, particularly without disturbing the hydraulic circuits.

5.2 Outstanding modifications (equipment upgrades Trailer Caliper)

Four (4) brake calipers are located on the trailer bogie; these are monitored by the Brake Control Unit (BCU). Each caliper has two micro switches. A micro switch is fitted on the spring brake to directly detect brake release. A second micro switch is fitted on the spring brake to directly detect a manual mechanical release. The brake release signal is sent to the BCU while the manual mechanical release signal is managed by the vehicle logic.



It is requested to replace one or both micro-switches of the calipers because they are very sensitive and require regular adjustments by the production team. 5.3 Detailed requirement Overhauls:

- I. Transfer of braking system components from Therapia Lane depot (Croydon) to location of overhaul facility.
- II. Overhaul of Hydraulic Power Unit (HPU),
- III. Overhaul auxiliary HPU,
- IV. Overhaul trailer brake calipers
- V. The trailer brake calipers and HPUs should be painted in 2 different colours for LHred and RH- green. The HPUs should be painted green.
- VI. Operational and functional test of braking system components.
- VII. Redelivery of overhauled complete to braking system components Therapia Lane depot (Croydon)

6. Technical Acceptance Criteria

The Technical Acceptance criteria are as follows;

- 6.1 Details of all missing and damaged parts on arrival including mitigation
- 6.2 Details of all components changed by serial number.
- 6.3 Details of all testing undertaken on braking system components
- 6.4 Details of all measurements taken and their compliance to agreed parameters based on the COI information;
- 6.5 Details of all Additional Awaiting work (AAW) together with authorisation sought.
- 6.6 All of this information should form the Certificate of Conformance which should come with any agreed Derogations and / or Concessions.
- 6.7 Any engineering change must comply with the London Trams Change to Rolling stock (CRS), Modification panel and Derogation processes.

7. CONTRACT DATA

	Subject				
1	London Trams Project Manager				
2	Delivery Location	Tram Depot, Coomber Way, Croydon London, CR0 4TQ			
3	Key Personnel				
4	Operator	Tramtrack Croydon Limited			
5	Redelivery Location	Tram Depot, Coomber Way, Croydon, London, CR0 4TQ			
		The overhaul programme will be undertaken at 3 Wabtec Faiveley facilities over the duration of the Project Plan, as identified in Schedule 5 Project Plan. The delivery addresses will be as follows:			
		1) Wabtec Faiveley, Leipzig Facility			
		IndustriestraBe 60,			
		04435 Schkeuditz			
		Germany			
6	Service Provider's	2) Wabtec Faiveley, Amien Facility			
	delivery address	Rue Andre Durouchez			
		80080, Amiens			
		France			
		3) Wabtec Faiveley, Birkenhead Facility			
		Morpeth Wharf			
		Birkenhead, UK			
		CH41 1LF			
7	Delivery and Collection Transport and Packaging Arrangements	London Tram will be responsible for packaging the 'dirty' components ready for collection. The Service Provider will be responsible for arranging both delivery and collection of the components and will fund the full transport cost based on collection of 'dirty' components upon delivery of 'overhauled' components. Should dirty components not be made available for collection in line with the agreed programme, the Service Provider reserves the right to charge for any reasonable additional transport cost incurred for additional collections if not back loaded.			

		Description	Qty per	Total Fleet	Float Qty	Total Project	
			Tram		City	Quantity	
		Brake caliper RH trailer	2	48	6	54	
		Brake caliper LH trailer	2	48	6	54	
		HPU Assistance	1	24	3	27	
8	Components for	HPU Graduable	1	24	4	28	
	overhaul	London Tram reserve the right to increase the quantity for the program if there is a further requirement but reasonable not should be given to the Service Provider to allow reasonable for overhaul kits and Change on Condition parts to be order against lead time. The trailer brake calipers and HPUs should be painted in 2 different colours for <i>LH- Red and RH- Green</i> . The <i>HPUs sh</i> <i>be painted green</i> before redelivery of the braking system					
	Time of the day for	components. Note: An email and t	elephone	confirmati	on must b	e made on the	
9	collection	or Note: An email and telephone confirmation must be made on t Thursday before 12:00 to the Material team at London Trams t confirm collection and delivery of the braking system compone				ndon Trams to	
10	Time of the day for	Note: An email and t					
	redelivery	Thursday before 12:00 to the Material Manager at London T to confirm collection and delivery the braking system compo					
11	Repair Days including collection and return delivery to London Trams depot	 Program at Leipzig (Germany) and Amien (France): - 4 weeks total turnaround time per component including any transport time to UK Program once Birkenhead Facility opens in 2018: - 2 weeks including transport time (after initial learning curve, as shown on Project Plan) 					
		Description		Qty per Tram			
	Maximum number of	Brake calip	or I H tra	ilor		2	
12	Components per	Brake calip		2			
	overhaul	HPU As		1			
		HPU Gr		1			
13	Works Arising	The core price detail Condition' parts, has Provider will procure attrition rates are ove Change on Condition additional component For Additional Arising excluded from core of these are chargeable – The Charges. An a The Service Provided project delays from u lead time for this mat surplus material from The Service Provided	ed in Sch listed in these pa er the per n Parts V ats g Work / overhaul e in line w greed sta r at contr unplanned terial). Th n The Sen	section 9 b arts to supp centages o Vabtec Fair Missing an price, as de vith price m ock of thes act comme d work (sub ne Authority rvice Provid	below. The port the pro- putlined in veley will d Damage efined in s penu show e parts wi ncement oject to ag y agrees t der at con	me 'Change on e Service ogram. If the section 10/11 procure the e parts that are section 10 below, <i>n</i> in Schedule 4 Il be procured by to mitigate preed delivery o procure any tract end should	

		Wabtec Faiveley shall endeavor to take all reasonable care to reduce the volume of parts ordered for Additional Arising Work / Missing and Damage. The parts list shall be review every 3 months between the project teams
		Material Additional materials not mentioned in the Specification or those items that are specifically excluded in Schedule 2 of this contract shall be charged to the Customer at Cost (open book) plus no more than 10%.
		The Service Provider shall complete a Proforma to request AAW outlining the costs.
14	Component Overhaul Instructions(COI)	The COI's must be viewed by London Trams no later than 1 month before the commencement of the overhaul programme.
		Core pricing includes;
15	Core Works	 All Labour for the braking system overhauls Fasteners and consumables Mandatory change parts identified in overhaul documents, defined in section 9 below. Certain Change on Condition parts included in core price, as defined in section 10 below Transportation to Overhauler site and return to Croydon depot
16	Warranty period	2 years warranty term Note: Warranty excludes fair normal wear and tear on components and any latent design defects.
17	Float	London Tram will provide 2 trailer bogie sets of float calipers and HPU's for the programme duration. Once the programme transfers to Birkenhead UK, the parties can discuss the option of removing 1 set of float from the cycle due to reduced transit time. Any amendment to Project Plan will be managed via Variation
18	Endemic and Epidemic Defects	 Endemic/Epidemic failures defined as: Endemic: a defect that appears no later than 3 years after the delivery of the final unit of the contract and as demonstrated by independent risk assessment is likely to appear any similar part or parts which have been supplied. Epidemic – a defect that has appeared in 5% or more of the
		parts supplied but no later than 3 years after delivery of the final unit of the contract.

8. Mandatory Change Parts included in Core Overhaul Scope:

Item	Qty	Code no.	Designation
8/4	1	4973000015	O-Ring
8/5	1	4973000019	O-Ring
8/7	1	4973000042	Pin
18	1	FT0012442-W00	Microswitch
21	1	1400050235	Plug
24	1	4973000028	Bellow
27	1	4973000032	Collar
* (39)	2	122944	Drain
* (39)	2	4973000109	Plug
41	1	120519	Bellow
46	2	1754000086	O-Ring
47	2	1754000087	Bush
51 .	4	4973000027	Collar
53	4	4973000043	Pad
55	1	4973000061	Collar
58	1	86612	Collar
59	1	86613	Collar
60	1	86616	Bellow
61	2	86618	Bellow
71	1	120411	Pin
74	1	121452	Piston
78	1	120423	Pin, retaining
80	1	120492	Bearing
81	1	120494	Washer
83	1	1400023110	Screw
84	1	4973000088	Circlip
86	1	1741420001	Bearing
87	4	1754114000	Plug
88	2	4973000085	Seal
89	2	4973000008	O-Ring
90	1	4973000086	Guide band
91	1	4973000017	Bearing
92	1	4973000020	Plate
94	2	4973000045	Seal
95	1	4973000048	Guide band
96	1	4973000051	Screw
97	1	4973000052	O-Ring
98	1	4973000056	O-Ring
99	1	4973000087	Guide band
100	1	4973000063	Bearing
101	1	4973000064	Plate
104	1	4973000067	Bush

8.1 Trailer Calipers (Right hand and left hand)

106	4	7133320008	Screw	
107	2	7133690008	Screw	
109	1	121454	Ring	
111	1	86944	Washer	
128	1	121713	Seal	
135	2	1754000003	Plug	
136	1	7042570008	Pin	
137	1	1101045003	Washer	

8.2 Graduable HPU

ltem	Qty	Code no.	Designation
1	1	120900	Motor
* (1)	2	121657	Screw
2	1	1754000100	Relay
* (3)	1	1754000223	Seal
* (4)(36)(66)	3	1755000017	Seal
7	3	1754003000	Oil level indicator
* (8)	1	1400051018	Seal
9	1	1754000102	Filter
* (11)	2	120464	Drain
* (11)	2	121656	Tube
* (11)	2	4973000032	Collar
14	1	1754000009	Air filter
15	1	86813	PC solenoid valve adjust / overhaul
* (15)	2	7133180608	Screw
* (15)	4	86865	O-Ring
17	1	120453	Seal
22	1	1754000007	Test point
* (22)	2	FT0010964-000	Test point
* (24)	1	1754000222	Seal
25	2	1754000101	O-Ring
* (27)	1	1754000229	Seal
* (28)	2	1754000230	O-Ring
*31(80)	4	1400130	Nut
*31(101)	4	7127820008	Screw
*31(108)	1.04	1754000141	Protective foam
*31(109)	0.28	1754000142	Protective foam
* (33)	1	1400051020	Seal
34	1	1754042000	Check valve
* (35)	1	1755000023	Seal
37	2	1754135000	O-Ring
39	4	1754000015	Screw
40 & 206 *(5)(30)(66)	5	1754000086	O-Ring
41	1	1754000126	Accumulator
43	8	1754097001	Silent bloc

44	4	120515	Tube
45	4	120563	Screw
48	4	86866	O-Ring
49	1	1754000115	Coupling
50	8	1400080172	Screw
51	1	1754000099	Pump
53 & 207 *(5)(30)(66)	5	1754000087	Bush
54	2	7121140008	Screw
57	<u> </u>	1754000112	Seal
60	1		Seal
		1754000075	
61	8	1754000137	Screw
62	4	7028510608	Nut
63	4	7095000608	Washer
65	1	4973000070	Plug
67	1	86816	0-Ring
71	2	1754071000	Screw
72	3	7053080408	O-Ring
74	1	86867	O-Ring
76	2	1754000153	Screw
77	4	7133080008	Screw
78	16	7095010608	Washer
81	7	1754000119	O-Ring
82	2	7133360008	Screw
84	4	86792	Washer
85	4	7121110008	Screw
88	2	7123770608	Screw
96	1	86769	O-Ring
104	1	1754000143	Nut
105	1	7050330408	O-Ring
* (106)	4	4973000027	Collar
* (106)	5	1754000036	Collar
* (106)	4	1400025206	Screw
* (106)	4	1400200106	Washer
107	1	7050320408	O-Ring
143	2	7104060008	Washer
151	2	7028540608	Nut
156	2	7132680608	Screw
157	4	7095310608	Washer
158	4	123216	Screw
159	1	1754042001	Check valve
160	1	7050410408	O-Ring
162	2	1400060002	Screw
163	2	7120840008	Screw
160	1	1754000216	O-Ring
191 *(86)	1	7048100408	O-Ring
204	1	1754000298	Sticker
	I	62	

8.3 Assistance HPU

Item	Qty	Code no.	Designation
1	1	120900	Motor
1* (145)	2	121657	Screw
2	1	1754000100	Relay
* (3)	1	1754000223	Seal
* (4)(66)	2	1755000017	Seal
7	3	1754003000	Oil level indicator
* (8)	1	1400051018	Seal
9	1	1754000102	Filter
* (11)	2	120464	Drain
* (11)	2	121656	Tube
* (11)	2	4973000032	Collar
14	1	1754000009	Air filter
17	1	120453	Seal
22	1	1754000007	Test point
* (22)	1	FT0010964-000	Seal
* (24)	1	1754000222	Seal
25	2	1754000101	O-Ring
* (27)	1	1754000229	Seal
* (28)	2	1754000230	O-Ring
31* (101)	4	7127820008	Screw
31* (80)	4	1400130	Nut
31* (108)	1.04	1754000141	Protective foam
31* (109)	0.28	1754000142	Protective foam
* (33)	1	1400051020	Seal
34	2	1754042000	Check valve
39	4	1754000015	Screw
40 *(5)(30)(66)	4	1754000086	O-Ring
41	1	1754000127	Accumulator
43	8	1754097001	Silent bloc
44	4	120515	Tube
45	4	120563	Screw
48	9	86866	O-Ring
49	1	1754000115	Coupling
50	8	1400080172	Screw
51	1	1754000099	Pump
53 *(5)(30)(66)	4	1754000087	Bush
54	2	7121140008	Screw
57	1	1754000112	Seal
60	1	1754000075	Seal
61	8	1754000137	Screw
62	8	7028510608	Nut
63	8	7095000608	Washer
65	2	4973000070	Plug
67	1	86816	O-Ring

71	2	1754071000	Sarow
71	3		Screw O Ding
		7053080408	O-Ring
74	1	86867	O-Ring
76	2	1754000153	Screw
77	4	7133080008	Screw
78	16	7095010608	Washer
81	4	1754000119	O-Ring
82	2	7133360008	Screw
84	4	86792	Washer
85	4	7121110008	Screw
88	2	7123770608	Screw
96	1	86769	O-Ring
105	1	7050330408	O-Ring
* (106)	4	4973000027	Collar
* (106)	5	1754000036	Collar
* (106)	4	1400025206	Screw
* (106)	4	1400200106	Washer
107	1	7050320408	O-Ring
143	2	7104060008	Washer
151	2	7028540608	Nut
156	2	7132680608	Screw
157	4	7095310608	Washer
158	4	123216	Screw
159	1	1754042001	Check valve
160	1	7050410408	O-Ring
162	2	1400060002	Screw
163	2	7120840008	Screw
164	1	1754000216	O-Ring
204	1	1754000298	Sticker