

14 CV

ASSEMBLY MANUAL

Part 2 - Assembly

Phoenix 400 14 hp Kohler motor – Version 2019

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Introduction

Before starting the assembly, please check the entire pallet to see if there are no missing parts. It is important to carefully read the entire manual before the beginning of the assembly in order to avoid any mistake or misunderstanding.

The assembly process has been simplified as much as possible, if you have any doubt, do not hesitate to contact us. We are available from Monday to Friday 8.30 am to 12am and 2pm to 5pm, by phone or mail (with picture if possible).

If a part seems damaged or non-compliant, please send us a picture by mail for verification. For any after sale service, please contact us by mail with the problem you have, along with a picture if possible, your address, phone number and the invoice number.

Do not hesitate to send us your remarks or suggestions to improve this manual and help us improve the quality of the service we offer.

We wish you well on the assembly and do not hesitate to contact us.



Assembly step by step

Our products are in constant evolution, even though we are regularly updating this document, it is possible that some pictures are not up to date and the part you have differs a little.

The pictures in this manual have been taken on several different assembly; the principles of assembly are the same as described here even if the picture differs from the part you may have received. If you have any doubts, do not hesitate to contact us.

Before beginning the assembly and to avoid any mistakes, it is important to know how a hydraulic distributor works, this part controls the alimentation of the cylinder and allows you to operate the excavator.

There is an input and an output, if you reverse them, the distributor is going to leek and you won't be able to operate the excavator.





Banjo bolts need 2 copper washers, one on top and one at the bottom.



















Place the slewing ring on the frame and bolt it down with 16 M12x30 bolts Put threadlocker on each bolt.

Professionnal ring - qty 1 12x30 bolt - qte 16 + threadlocker















































Install the brackets on the arm.

Do not put the bucket now, i twill be easier later.

Arm bracket - qty 1 Bucket bracket - qty 1 Ø25 lg 175 + GE teardrop shaft - qty 2 Ø6 pin - qty 2





Motor assembly	The general principle is the same for every motor, only some small part may differ depending on the motor.		
	 Fill up the oil level, there is 2 plugs on either side of the motor. One of the plugs has a gauge to check oil level. Take the key off the keypath, add some gas in the tank and start the motor to check if there is no problems. 		
	Kohler CH395 motor - qty 1 Oil 5W30 (not included)		
	Put the key back on the keypath and install the elastic coupling on the shaft.		
	Half elastic coupling - qty 1		















































Place the first plate on the pivot axis with a Ø20 lg 430 teardrop shaft and lock it with a 6x16 bolt on the turret.

Lock the other side with a 18x50 bolt + locknut.

Pile on the place depending on your needs and lock then together with a 18x100 bolt + locknut.

Support counterweight - qty 1 Plate counterweight - qty 4 Axe Ø20 lg 430 teardrop shaft- qty 1 Vis 6x16 bolt - qty 1 18x50 bolt - qty 1 18x50 locknut - qty 1 18x100 bolt - qty 1 M18 locknut - qty 2





Before filling the tank, it is important to clean it to avoid having any debris/metal/dust tint the hydraulic system. The best way to clean it is with a wet clean rag then a magnet to get rid of any metallic particles.

If the pump is damaged because of a bad cleaning or maintenance of the hydraulic system, the warranty of this part as well as the warranty of the hydraulic motors may not be accepted.

After filling the tank with oil and starting the machine, it is possible to have a lack of power or that the motor stops while using any function, it will then be necessary to adjust the pressure.

To do so, take off the cap of the security valve then with an Allen key screw or unscrew the bolt circled in green :



Ideally, you need to measure the pressure at the entry of the distributor, the pressure should be at 150 bar, if you do not have the necessary equipment do the following:

- If you lack power tighten the bolt ¼ turn at a time until you have enough pressure so that the hydraulic motors work properly. Do not overtighten, this may cause damages to the pump and other parts of the hydraulic system.
- If the hydraulic motors stop the engine when activated, the pressure is to high and you need to loosen the bolt ¼ turn at a time.

Check the oil level regularly, you need to drain the entire tank at least once a year.

Then maintenance schedule and procedure are listed in the user guide available on our website.

For the first hour of use, one should use the excavator in an open area to avoid collateral damages.

Do not hesitate to send us your comments about this guide in order to improve it.





2 fittings AT12L-12x17 to screw on the cylinder's elbows then 2 UM12L-15x21 on the hoses.

Then connect the quick couplers as you wish. This option allows the operator to use an

auxiliary hydraulic attachment quickly.

AT12L-15x21 - qty 2 UM12L-12x17 - qty 2 CCF1/2 - qty 2 CCM1/2 - qty 2

Option Hydraulic line for telescopic arm



The hydraulic lines for the telescopic arm are 2 hoses connected from the distributor instead of the bypass 15-16 going to the telescopic arm.

Warning : option not compatible with the hydraulic line to the tip of the arm

Hose Ø8 lg 2550 C / MC1/2 – qty 1 Hose Ø8 lg 2500 B / MC1/2 - qty 1 CCF1/2 - qty1 CCM1/2 - qty 1



Option hydraulic line to the tip of the arm



The hydraulic line to the tip of the arm are 2 hoses connected from the distributor instead of the bypass 15-16 going to the telescopic arm.

Warning : option not compatible with the Hydraulic line for telescopic arm

Hose Ø8 lg 3800 C / MC1/2 - qty 1 Hose Ø8 lg 3800 B / MC1/2 - qty 1 CCF1/2 - qty 1 CCM1/2 - qty 1 Hose guide - qty 1











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	Desig	Ø20 lg 60	xe Ø20 lg 9	Ø20 lg 450	Ø25 lg 155	(e Ø25 lg 1	Ø25 lg 175	Ø25 lg 210	25 lg 210 +	Ø25 lg 450	Axe Ø2			Date:	ECHELLE: 1:50
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Date:

Client:

Phoenix 400 <u>Kit</u>

N° F/D:

Configuration 14 cv - Kit à Soude

	I	1	Opti	on(s)		1	1
	Attache rapide KIT / SP			Option	Push pull Godet *		
	Godet 20 KIT / SP			Option	Ligne hydrau AV *		
	Godet 30 KIT / SP			Option	Ligne hydrau AV - BT		
	Godet 40 KIT / SP						
	Godet 60 - Curage KIT / SP			Option	Joint tournant 6 voies		
	Godet 80 KIT / SP			Option	Compte heure		
	Dent ripper KIT / SP						
	Doigt manutention KIT / SP			Option	Huile hydraulique 10L		
	Godet chargeur KIT / SP			Option	Huile hydraulique 20L		
	Godet Rateau KIT / SP			Option	Huile moteur SAE30		
	Godet squelette KIT / SP			Option	Cartouche graisse 400 g		
	Arceau KIT / SP						
	Toit KIT / SP			FREINFIL-FORT	Frein fillet Serrage Fort 60G		
	Contre poids 95 kgs KIT / SP			COLLEHYDRO	Colle hydraulique 50 ml		
	Bras téléscopique KIT / SP			RUBAN-PTFE	Rouleau Ruban téflon		
	Taille haie KIT / SP			COLLIER-9x180	Collier installation 9 x 180		
				COLLIER-9x360	Collier installation 9 x 360		
	•		A	(es	•		
A-20 lg 60	Axe Ø20 lg 60	2			Tube Ø42,4 ep3 lg 55	2	
A-20 lg 90-1P	Axe Ø20 lg 90 - 1 perçage	1		BA-25.25 lg 10	Bague Ø25,25 lg 10	6	
A-20 lg 435	Axe Ø20 lg 435	1		BA-25.25 lg 15	Bague Ø25,25 lg 15	4	
A-20 lg 570	Axe Ø20 lg 570	1		BA-25.25 lg 20	Bague Ø25,25 lg 20	2	
				BA-25.25 lg 41	Bague Ø25,25 lg 41	2	
A-25 lg 155-1P	Axe Ø25 lg 155 - 1 perçage	7		BA-25.25 lg 48	Bague Ø25,25 lg 48	1	
A-25 lg 180-1P	Axe Ø25 lg 175 - 1 perçage	6		BA-25.25 lg 60	Bague Ø25,25 lg 60	3	
A-25 lg 210-1P	Axe Ø25 lg 210 - 1 perçage	2		BA-25.25 lg 65	Bague Ø25,25 lg 65	2	
A-25 lg 435	Axe Ø25 lg 435	1		BA-25.25 lg 72	Bague Ø25,25 lg 72	2	
A-25 lg 740-2P	Axe Ø25 lg 740 - 2 perçage	1		BA-25.25 lg 84	Bague Ø25,25 lg 84	1	
				BA-25.25 lg 94	Bague Ø25,25 lg 94	2	
A-35 lg 740-2P	Axe Ø35 lg 740 - 2 perçage	1					
	+			•		•	

Listing acier											
LA-1045-8-D	Renfort 2 bras levée	1		LA-1314-10-A	Plateforme tourelle AV	1					
LA-1046-8-C	Renfort Bras balancier	1		LA-1315-10-B	Plateforme tourelle AR	1					
LA-1049-6-B	Calle renvoi bras	1		LA-1316-15-A	Renfort tourelle long	1					
LA-1060-4-C	Plaque réservoir	1		LA-1317-15-A	Renfort tourelle court	1					
LA-1061-15-A	Barbotin	2		LA-1318-12-A	Renfort pivot bas	1					
LA-1071-5-A	Goutte d'eau 20	4		LA-1319-15-B	Renfort pivot haut	1					
LA-1072-5-A	Goutte d'eau 25	18		PL-1320-8-A	Marche pied gauche	1					
TU-1073-3-A	Tube lame 70 lg 800	1		PL-1321-8-A	Marche pied Droit	1					
LA-1075-10-B	Goutte d'eau 25 ep 10	2		LA-1322-10-A	Plaque rotation tourelle	1					
TU-1076-5-B	Tube béquille lg 700	1		PL-1323-8-A	Support distributeur gauche	1					
TU-1077-5-A	Tube béquille lg 140	1		PL-1324-8-A	Support distributeur doit	1					
PL-1121-8-A	Lame stabilisatrice	1		LA-1325-8-B	Fixation support distri	2					
LA-1122-8-C	Fixation lame	4		LA-1326-8-A	Tenon plaque moteur	1					
LA-1125-12-B	Renvoi bras	2		LA-1327-4-A	Fixation moteur Thermique	1					
LA-1214-8-B	Poignée	1		LA-1328-4-B	Support siège	1					
LA-1215-8-C	Renfort 3 bras levée	1		PL-1329-3-C	Carter moteur	1					
LA-1265-8-A	Fixation JT	2		PL-1330-3-A	Carter réservoir	1					
LA-1266-4-C	Support JT6V	1		LA-1331-3-A	Fond réservoir	1					
LA-1271-4-A	Bouchon tube tourelle	1		LA-1332-8-A	Tenon siège	2					
TU-1272-5-B	Tube tourelle 60 lg 250-1P	2		LA-1333-4-A	Support siège	1					
LA-1305-8-C	Plateforme chassis bas	1		LA-1334-12-A	Renvoi godet	2					
LA-1306-8-A	Armature avant	1		LA-1335-8-A	Bras balancier	2					
LA-1307-15-B	Armature arriere	1		LA-1336-8-B	Bras levée	2					
LA-1308-15-C	Flasque chenille	2		LA-1337-8-C	Renfort 1 bras levée	1					
LA-1309-8-A	Gousset 55	8		LA-1338-15-A	Joue noix	2					
LA-1310-15-A	Butée basse	1		LA-1339-12-A	Pivot noix	3					
LA-1311-15-A	Fixation moteur traction	2		LA-1340-10-A	Fond noix	1					
LA-1312-6-A	Renfort moteur traction	1		LA-1341-8-A	Renfort noix	2					
LA-1313-5-B	Patin stabilisateur	1		LA-1342-8-A	Butée tendeur	4					
	+		Gér	néral			•				
MOT-14CV-Kol	Moteur 14 CV Kolher	1		ROLLER 160-25	Roller 160 - 25	2					
LAG2-90	Lanterne 90 Groupe 2	1		ROLLER 240-25	Roller 240 - 25	2					
AEG2-25,40	Acc elastique G2	1		ROLLER 240-35	Roller 240 - 35	2					
PDG2-6+6-CT-D	Pompe 6 + 6 G2	1									
	Diviseur de débit 50/50	1		VD25/40C100	Vérin 25/40c100	2					
	Radiateur huile	1		VD30/50c300	Vérin 30/50c300	2					
	Support radiateur	1		VD30/60c300	Vérin 30/60c300	1					
	Cable Electrique 2 fils 1,6m	1									
	Siège avec accoudoir	1		D4-2J-40L	Distri 4 éléments 2 joy	2					
	Couronne de flexibles	1		D2-40L-CR	Distributeur D2 - Cranté	1					
COT650-M6	Couronne orientation T-pro	1		MCRN200CDO	Moteur hydro 200	3					
PIG-E-M6-12D	Pignon engrenage M6	1									
					Batterie 12v	1					
LA-1229-8-A	Plaque contre poids	5			Support batterie	1					
LA-1230-8-A	Oreille contre poids long	2									
LA-1389-15-B	Oreille contre poids court	1		180x72x43	Chenilles	2					

Carton									
Bouchon M22	Bouchon avec jauge	1			Accelerateur	1			
C3/8-p	Crépine plate	2			Plaque joint reservoir	1			
EC19M3/8	Embout cannelé 3/8	2		RC10-10x34	Caoutchouc amortisseur	4			
EC19M1/2	Embout cannelé 1/2	2		GF16	Guide Flexible double	3			
UM12L-15x21	Raccord union 15x21	10			Etage guide flexible	1			
UM12L-12x17	Raccord union 12x17	20							
CM12L-12x17CO	Raccord Coudé 12x17	4			Cable Batterie 16 ² - 25 cm	1			
T12L	Té 12L	2			Cable Batterie 16 ² - 50 cm	1			
RM1/2-F3/8	Réduction M1/2-F3/8	6		CS29-31	Collier acier	4			
RM1'-F1/2	Réduction 1" - 1/2	2			Cosses 16 ² à sertir Ø6	1			
VC17-12x17	vis creuse Ø17	18			Cosses 16 ² à sertir Ø8	3			
JC17	joint cuivre Ø17	40							
JC18	Joint cuivre Ø18	1		GR6-D	Graisseur	10			
CCM1/2	Push pull 1/2	3		GR6-90	Graisseur coudé 90	2			
CCF1/2	Push pull 1/2	3		GC006	Goupille	25			
	Rondelle ø5	4							
	Rondelle ø6	15			Vis STHC 6x10	1			
	Rondelle ø8	25			Vis 5/16 x1"1/4	4			
	Rondelle ø8 x 30	2							
	Rondelle ø8 x 40	15			Vis 6x25 BTR	8			
	Rondelle ø12	4			Vis 6x60 BTR	2			
	Rondelle ø18	11			Vis 8x20 BTR	8			
	Rondelle ø20	2			Vis 5x20 TH	2			
	Rondelle ø25 ep 1	10			Vis 6x16 TH	20			
	Rondelle ø25 ep 4	6			Vis 8x30 TH	12			
					Vis 8x40 TH	1			
					Vis 8x50 TH	2			
	Ecrou M5 stop	2			Vis 8x60 TH	11			
	Ecrou M6	2			Vis 8x100 TH	1			
	Ecrou M6 stop	4			Vis 12x20 TH	2			
	Ecrou M8 stop	30			Vis 12x30 TH	19			
	Ecrou M12 stop	6			Vis 12x50 TH	6			
	Ecrou M16	4			Vis 16x100 TH	4			
	Ecrou M18 stop	11			Vis 18x50 TH	9			
	Ecrou M20 stop	1			Vis 18x70 TH	1			
	Ecrou M20	1			Vis 18x120 TH	1			
					Vis 20x80 TH	1			
	Ecrou M16 long	4							
	Bossage M22 a souder	1				1			
US-1154-A	Bague clavetée	2							