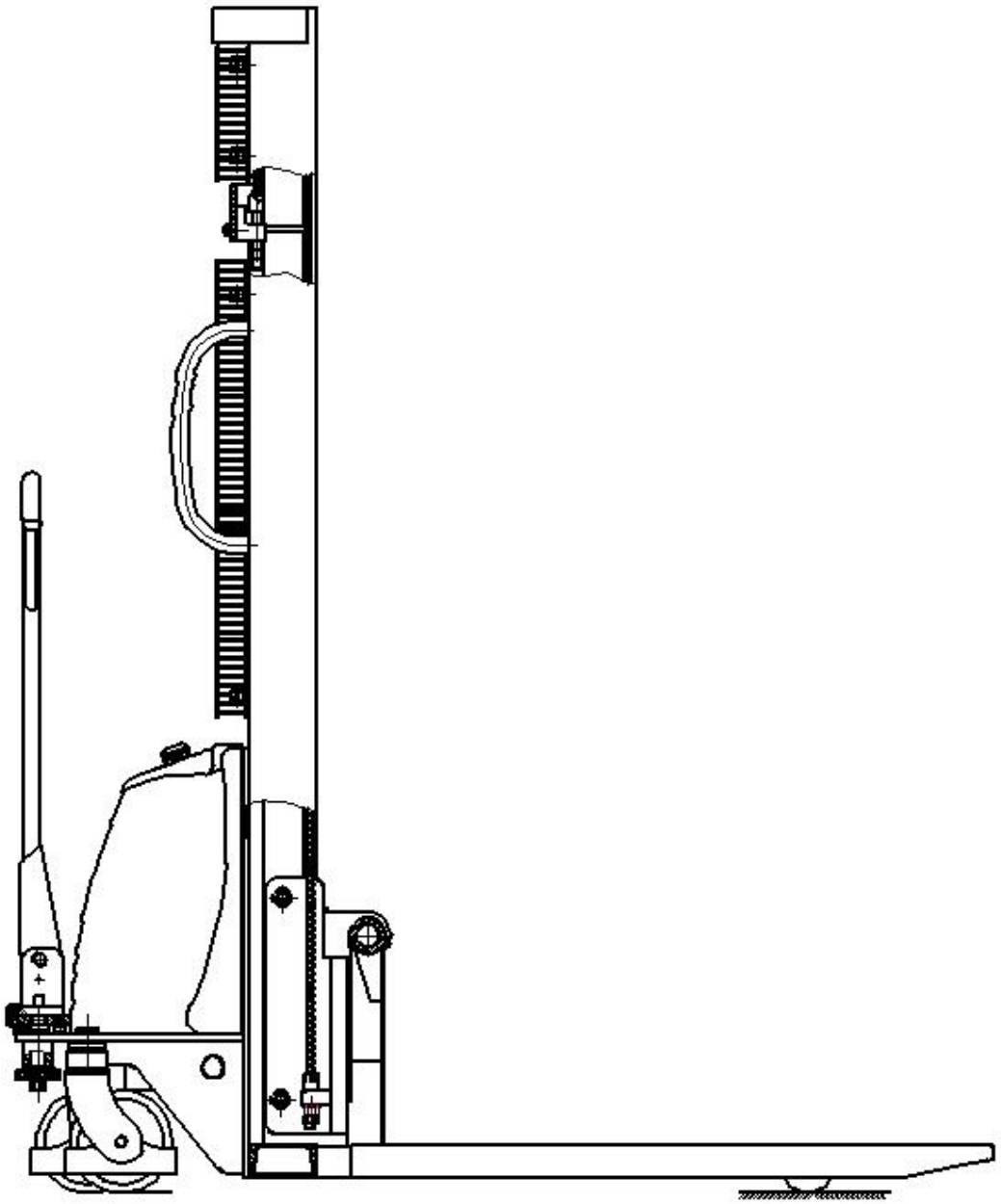
KX-CDSD Semi-Electric Stacker
Instructions Manual



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Welcome to use KX-CDSD semi-electric stacker series!

Warning

- **Please read this instruction manual carefully before using the KX-CDSD semi-electric stacker.**
- **This manual works for all KX-CDD series electric tow truck, and we reserve our rights for technical reform. Pictures and object maybe slightly different, please in kind prevail.**

1. CORRECT USAGE

1.1 Usage specification

The stacker should be used on the flat and solid ground. Do not use it on the public road. Please following instructions to operate and do service.

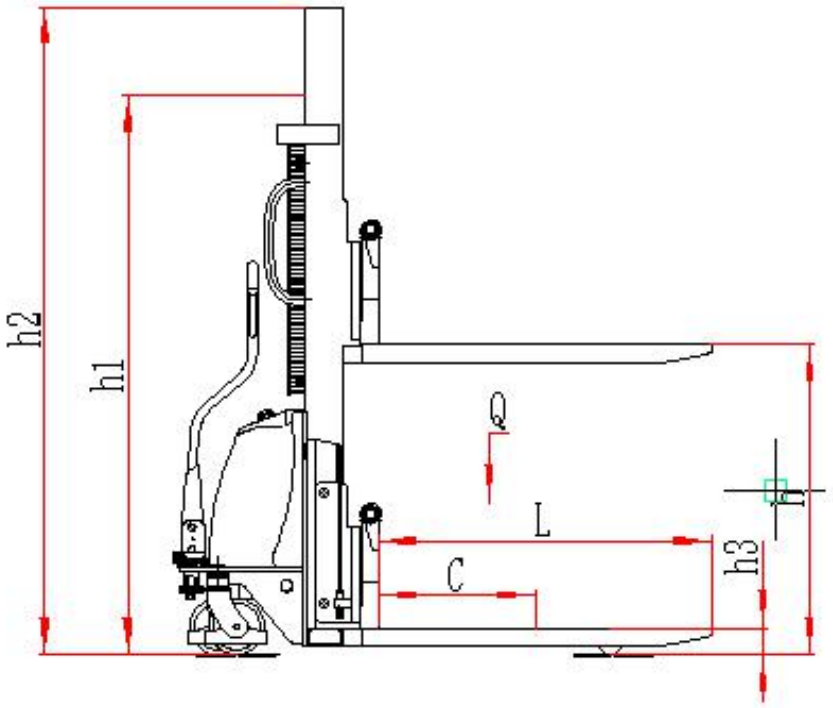
1.2 Operation instructions

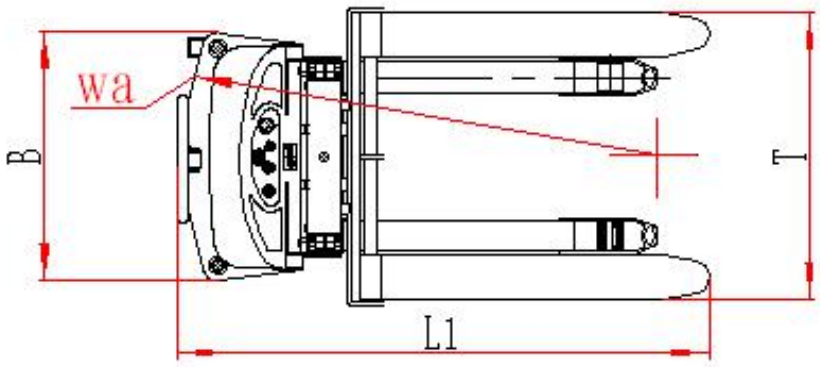
Operators should be trained and known stacker's function, structure, and knowledge of service clearly.

1.3 Safety precautions

Please check stacker carefully before use. Do not use any stacker with malfunction.
Using stacker correctly will improve working efficiency, otherwise, it may cause dangerous.
Do not stand on the left or right side of stacker when loading/unloading cargos or lifting/lowering forks.
Operator should take responsible to the stacker's service life and maintenance.

2.DESCRIPTION OF STACKER





2.1 Technical data

Articles/model	unit	KX-CDSD		
Rated load capacity Q	lb	2200	3300	4400
Loading center distance C	in	19.6		
Lifting height h	in	62.9/78.7/98.4/118		
Door frame retract height h1	in	61.7/71.5/81.4		
Door frame max. working height h2	in	81.4/101/120/140		
Fork lowest height h3	in	3.3		
Fork length L	in	35.8(45)		
Overall length L1	in	62.4		
Fork adjustable width T	in	12.5/26.7		
Overall width B	in	41		
Turning radius Wa	in	58		
Lifting speed no-load/full-load	fpm	23.6/19.6		
Lowering speed no-load/full-load	fpm	26.5/29.5		
Lifting motor	V/Kw	12/1.6		
Batter	V/Ah	12/15		
Charger	V/A	12/15		
Net weight	kg	930	980	990

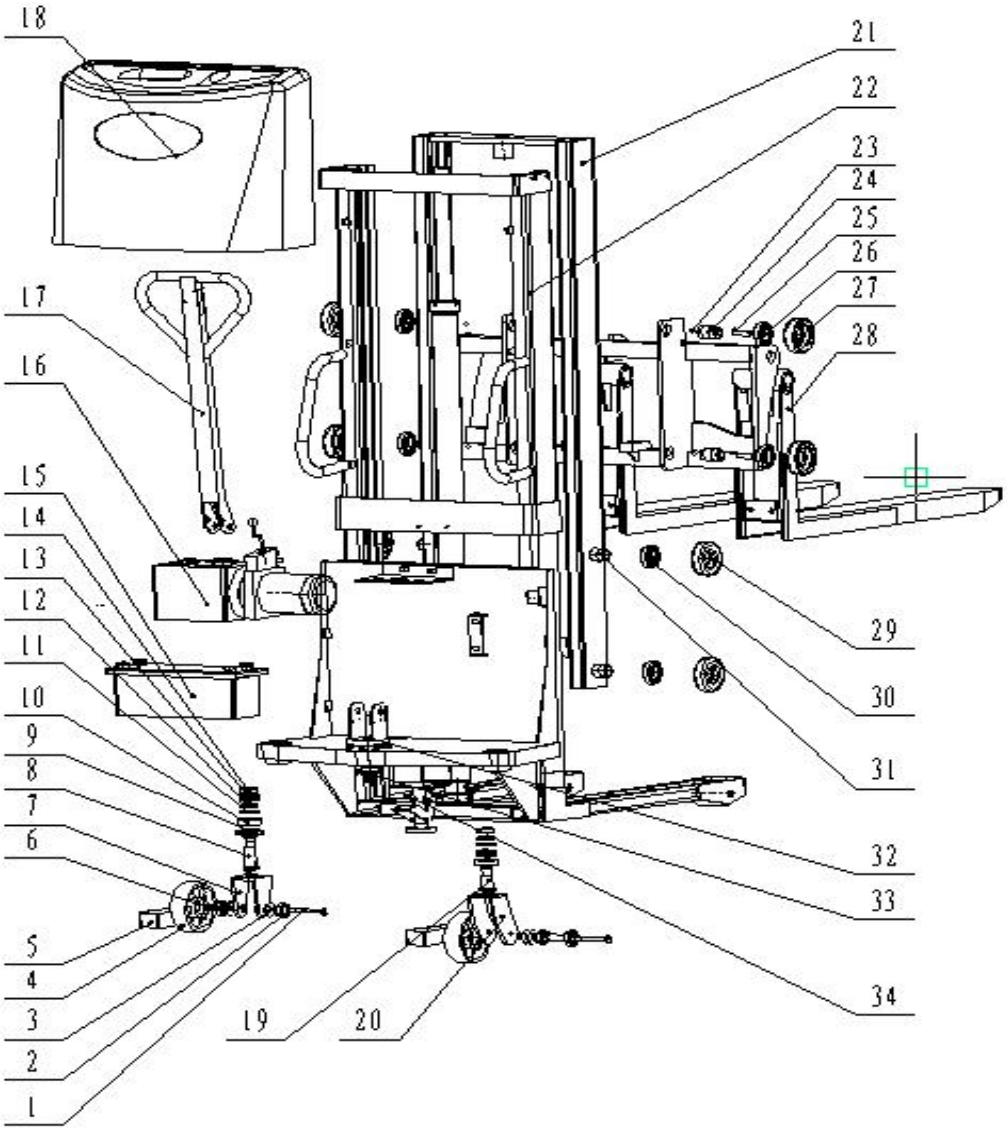
2.2 Application

Semi-electric stacker uses battery as power source to lift or lower cargos. It has characteristic of steady lifting, simple operation, easy maintenance, and etc. The stacker is only allowed to use on the flat ground.

2.2.1 Load and loading center distance should meet the requirements of instructions manual, and it is prohibited to overload.

2.2.2 When stack cargos, the center of gravity should be within two forks. Do not carry loose or oversize cargos.

2.3 Explosive drawing



No.	Name	quantity	No.	Name	quantity
1	Hexagon bolt C class M12	2	18	Cover	1
2	Deep groove ball bearing 6204	4	19	Bending wheel frame	1
3	Wheel gasket	4	20	Bending wheel shaft	1
4	Big wheel	2	21	Inner door frame	1
5	Protector	2	22	Outer door frame	1
6	Hexagon nut C class M12	2	23	Steel ball	8
7	Straight wheel frame	1	24	Pulley spindle	8
8	Straight wheel shaft	1	25	Hexagon bolt—full thread C class M16*15	4
9	Passive sprocket	1	26	Deep groove ball bearing 6207	8
10	Deep groove ball bearing 6206	2	27	Roller	4
11	Gasket (1)	2	28	Fork	1
12	Gasket (2)	2	29	Roller	4

13	Thrust ball bearing 51206	2	30	Deep groove ball bearing	4
14	Deep groove ball bearing 6005	2	31	Axle	4
15	Battery	1	32	Bracket seat	1
16	Hydraulic station	1	33	Main chain wheel	1
17	Handle	1	34	Brake assembly	1

2.4 Operating skill

1. Turn on power switch.
2. Unlock the electric door lock.
3. Lower the forks to appropriate height.
4. Move the stacker and insert forks under the pallet.
5. Lift cargos and move stacker to destination.
6. Lower the forks and back off the stacker.

2.4.1 The brake assembled at the rear frame is designed for safety. When lifting or lowering cargos, please press down the brake to prevent stacker from sliding.

2.4.2 The battery should be charged when voltammeter turns red. When charging, please press down emergency stop switch, turn off electric door lock, connect charger to the socket on the stacker, and then turn on the charger switch until the green light is on.

3. MAITENANCE AND SERVICE

3.1 Maintenance

3.1.1 Machinery maintenance

Check at least once every six months. Add some lubricating oil to wheel bearing and portal bearing. Check whether moving parts are flexible, fasteners are tightened, and forks goes up and down well.

3.1.2 Hydraulic maintenance

Check at least once every six months. Check whether oil cylinder works normally; whether hydraulic connector and hydraulic hose have leakage;

In order to keep stacker working well, please use HL-N46 hydraulic oil when temperature is from 23℉ to 104℉, or use HV-N46 hydraulic oil when temperature is from -31℉ to -58℉.

3.1.3 Electric maintenance

Check at least once every three months. Check whether the proportion of electrolyte is proper (Tropics: the proportion of electrolyte should be 1.25 (77℉); other area: the proportion of electrolyte should be 1.25 (77℉);); clean dust on the battery connecting terminal; check whether terminal stud are connected well;

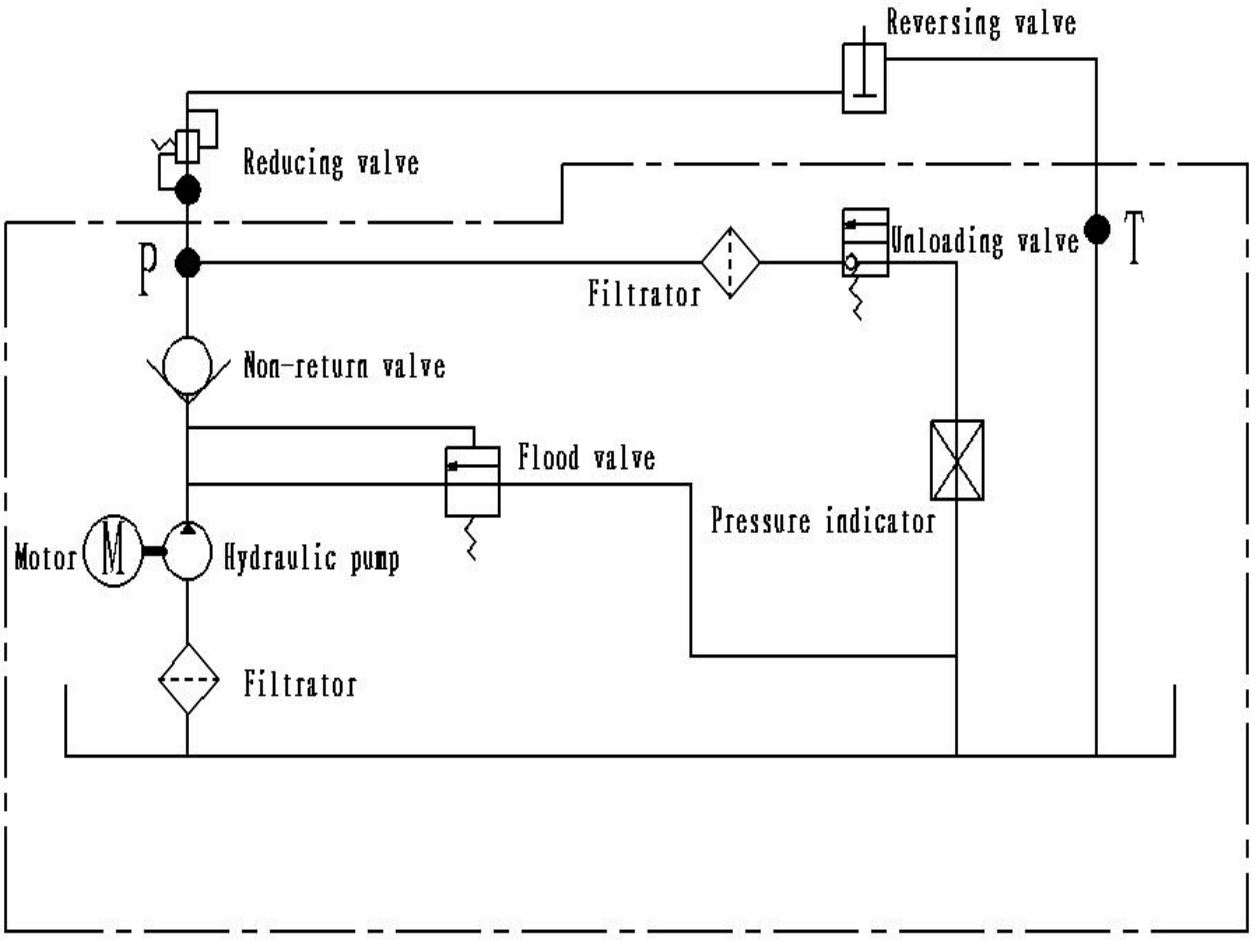
3.1.4 Please charge immediately,(Do not over 24 hours), when battery is fully discharged or charging signal is on, otherwise, it may shorten the service life of battery. If not use tow truck for a long time, please charge once per month. Do not over charge or over discharge, in order to avoid

battery damage (charging time: 8 hours).

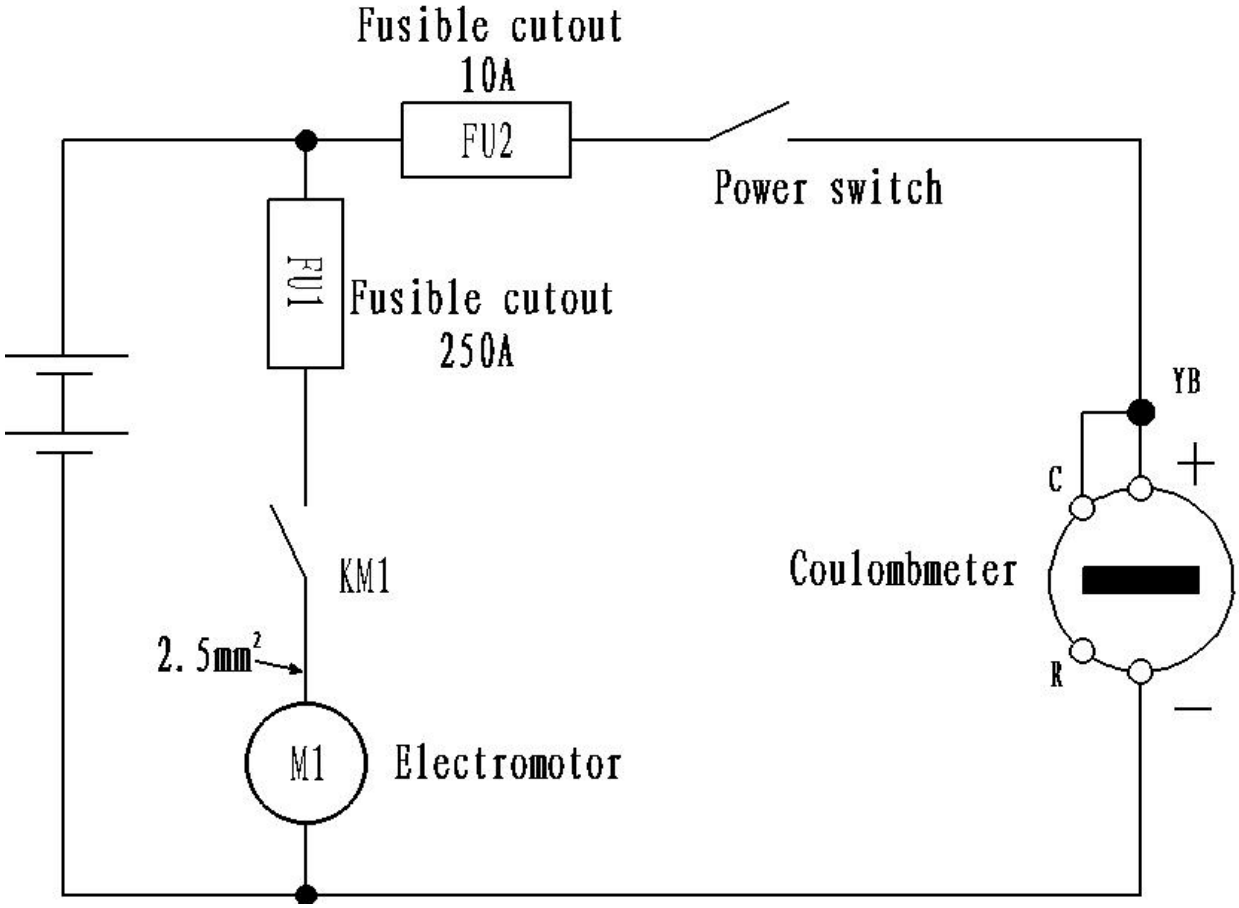
4. MALFUNCTION ANALYSIS AND SOLUTION

No.	Malfunction	Cause	Solution
1	Voltmeter has no display after opening electric door lock	The 10A fuse of electric system is burn out or the power switch is damaged.	Change fuse or power switch
2	Hydraulic station and motor pump have noise when working	The magnetic valve of hydraulic station is dirty.	Clean magnetic valve
3	Cannot lift cargo	Lifting oil cylinder has internal leakage.	Change seal ring
		The hydraulic oil is not enough.	Add some hydraulic oil
		Low battery	charge
		Did not turn on power valve.	Turn on power valve
		Electric door lock is locked or damaged.	Unlock or maintenance the lock
		Oil pump motor is damaged.	Maintenance or change
		Oil pump is damaged.	Maintenance or change
		Lifting button is broken.	Maintenance
4	Cannot lower forks	Inner door frame is deformation .	Maintenance or change
		Outer door frame is deformation.	Maintenance or change
		The roller of door frame is blocking.	Adjustment
		Guide bar of door frame is curved.	Maintenance
		Oil return hole is blocking.	Clean
		The control magnetic valve is out of control.	Clean
5	Low battery after charging	Battery unit is broken.	Maintenance or change
		Low electrolyte level	Add some electrolyte
		Electrolyte is dirty.	Change electrolyte

5.HYDRAULIC CIRCUIT



6. ELECTRIC CIRCUIT



7. PACKING LIST

No.	Name	Usage part	Quantity	Remake
1	Key of electric door lock	Open electric door lock	2	
2	Charger	Charge battery	1	
3	DH scraper seal	Lifting oil cylinder	1	
4	Fuse		1	250A
5	Accessories		1	Include technical documents

8. OPERATING DIAGRAM