

Dynaset Magnet



....SERVING INDUSTRY WORLD-WIDE SINCE 1919

GENSCO EQUIPMENT (1990) INC.
53 CARLAW AVENUE, TORONTO, CANADA M4M 2R6
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5307 DIVIDEND DRIVE, DECATUR, GEORGIA 30035
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ACROSS THE USA CALL 1-800-268-6797

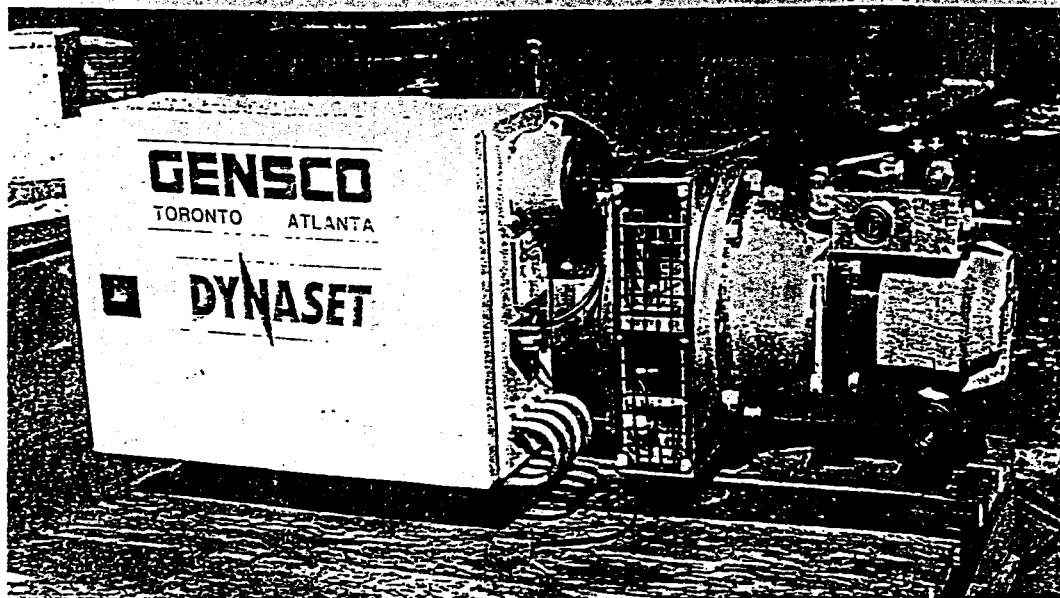
DYNASET

GENSCO

HYDRAULIC DRIVEN

MAGNET POWER & CONTROL SYSTEM

A complete package to provide 230 volts D.C. for magnet operation plus electric automatic lift/drop control. Simple, fast installation with minimum space required. No extra pump or motor is needed.



230V

MODEL	MINIMUM RECOMMENDED FLOW	MAXIMUM PRESSURE TO DYNASET	APPROXIMATE WEIGHT SIZE	
HMG 3.5 KW	5 GPM	3050 PSI	17" x 12" x 8"	65 lbs
HMG 6.0 KW	8 GPM	3050 PSI	18" x 14" x 10"	110 lbs
HMG 10.0 KW	12 GPM	3050 PSI	24" x 17" x 14"	155 lbs
HMG 12.0 KW	14 GPM	3050 PSI	28" x 18" x 15"	185 lbs
HMG 15.0 KW	18 GPM	3050 PSI	28" x 18" x 15"	220 lbs
HMG 20.0 KW	24 GPM	3050 PSI	33" x 16" x 20"	355 lbs

- ★ Supplied as complete self contained system with all switches for off/on and lift/drop functions.
- ★ Guaranteed constant voltage regardless of engine RPM, or excavator movement. Only 3 hoses are normally required for hydraulic installation. Automatic voltage regulation with the supplied priority valve connected in series.
- ★ Full overload and short circuit protection.
- ★ 24 volt DC control circuit (from battery) is used for the automatic drop circuit and electric push button control for lift and drop.
- ★ No bulky and costly resistor banks, mechanical contactors with lift/drop coils, contacts etc. Diode bridge electric circuit card.

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PHONE: 416-465-7521 FAX: 416-465-4489 IN THE USA: 800-268-6797

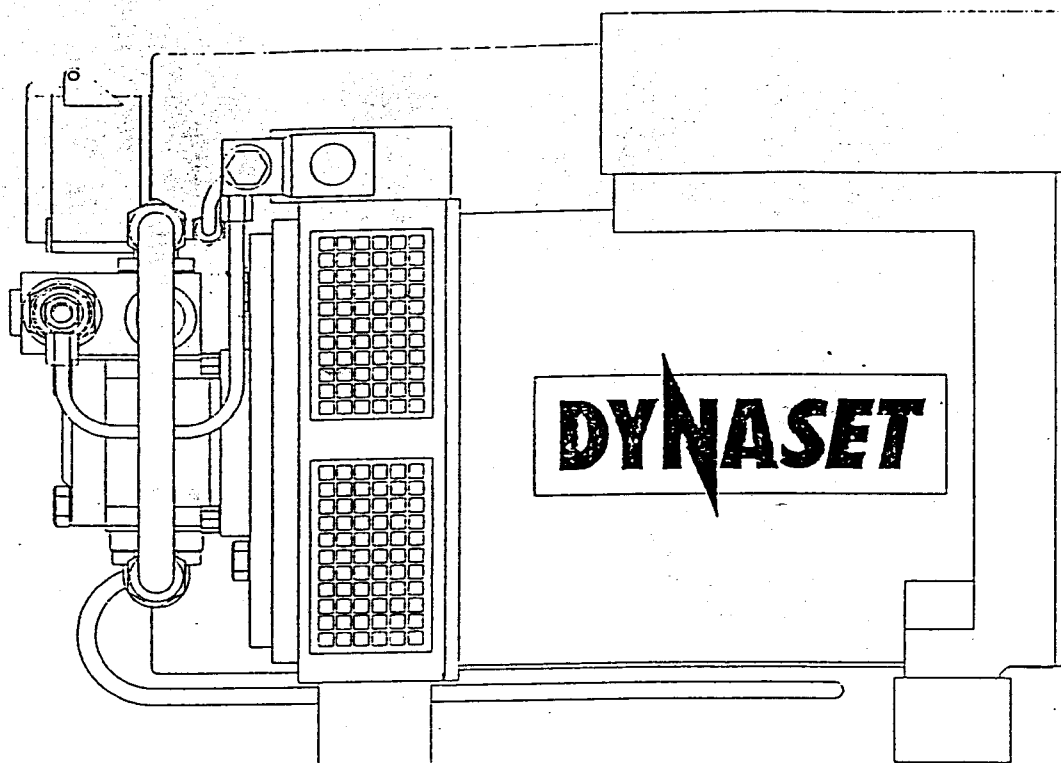
GENSCO AMERICA INC.

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Specifications subject to change without notice.

DYNASET



MAGNET GENERATORS

6 - 25 KW MODELS

Since 1919



GENSCO AMERICA, INC.

ACROSS USA 800 268-675

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GENSCO EQUIPMENT (1990) Inc.

53 Carlaw Ave. Toronto • Canada M4M 2R6 • Tel: 416 465-7521 • Fax: 416 465-4489

DYNASET MAGNET GENERATORS

Dynaset magnet generators are a complete electrical power supply for a lifting magnet.

All components have been installed in one small, easy to install package.

A speed controlled hydraulic motor drive is standard.

These and other features outlined below make DYNASET magnet generators, easy to install on all hydraulic machines.

FEATURES

1. Speed controlled, high quality gear motor.
 - motor speed is kept constant by the built-in speed control valve.
 - electric solenoid (off/on) valve and pressure relief valve are standard features.
2. Alternator
 - An AC alternator of reliable construction, where the number of wearing parts has been minimised is utilised. Main power is taken from the stator winding.
 - Compound type voltage regulator keeps the voltage constant, not depending on the load.
 - as an option, a switch is available to produce AC current (220 Volts, 3 Ph.)
3. Control System
 - Automatic overload protection for the generator.
 - Control of the magnet from one push button on the control lever (or foot operated switch)
 - Voltage peaks are prevented by an effective diode controlled safety resistance, that also protects the magnet from short circuits (i.e. damaged connectors, cable etc.)
 - All controls operate on safe 24 volts DC (12 volt systems available)
 - Control electronics operate complete reverse magnetization function (magnet discharge system or "antimagnetism) automatically according to the properties of the magnet.
 - No arcing of contacts, resulting in long component life.

4. Mounting

DYNASET Magnet Generators can be mounted almost anywhere on the frame of the machine. The unit is both rain and dust proof. The Generator conforms to IP23 Protection and the Control Box to IP44.

Hydraulic power is usually taken from a separate pump circuit that is not being used. Where this is not possible, or, on machines with VARIABLE DISPLACEMENT or LOAD SENSING PUMPS, the Generator can be connected to the main pump circuit using a solenoid operated flow divider or "Priority Valve" – supplied if requested.

The Priority Valve has adjustments for maximum pressure and oil flow exiting to the DYNASET. The port marked T is the oil return, preferably direct to the tank.

A low power Generator (for truck mounted cranes) can also be connected as a by-pass circuit to the pump circuit for the boom.

5. Operation

The operator starts the DYNASET by an electrical switch supplied. At the same time the control power (24 volts DC – or optional 12 volts) is switched on. The Magnet is controlled by a single push button on the control lever, also supplied.

Pressing the push button at first brings current to the magnet. When the material should be dropped, the operator presses the button a second time and a reverse current is automatically switched on. This discharges the remaining magnetism in the magnet.

PCI - CONTROL CARD

24 Volt Indicator LED - GREEN LIGHT - Light is on when 24V main switch is on.
If LED is off fault is in 24 volt control wiring from cabin or fuse is burnt out. (6.3 A)

K1 RED K2 YELLOW K3 GREEN LED INDICATOR LIGHTS
CONTACTOR INDICATIONS:

- If contactors do not close fault is in coil of contactor or in wiring.
- If LED's are off the PCI card is not working properly.

FAILURE INDICATOR LED (RED):

Magnet current metering and control voltage indicator.

If LED is on continuously there is a problem with current to the magnet.

- Magnet cable is open or broken
- Current metering system in PCI card may have failed.

If LED is flashing after working cycle there is a bad connection in 24 volt source. If 24 volt drops for more than .22 seconds the LED will start flashing.

POTENTIOMETER - VIRT 1: Adjust induction current of magnet at opening contactor K2. PCI card calculates the correct time to open contactor K2 by monitoring the magnet induction current. Contactor K2 should open safely and without arc automatically, independently of induction current of magnet.

Adjusted induction current can be measured by mV meter (11mV = .001 Volt) between V1 and GND measure points in the card when the 24 volt line is on. 1 A = 40 mV.

Factory adjustment is 200 mV or 5 A.

For rapid cycling work this can increase up to 360 mV or 9A. DO NOT increase beyond this point as it will shorten the life of contactor K2.

POTENTIOMETER - VIRT 2: Adjusts demagnetizing current of magnet.

Adjusted demagnetizing current can be measured by mV meter between V2 and GRN measuring point in the card when the 24 volt line is on.

Factory adjustment is 80 mV or 2 Amps. DO NOT increase more than 100 mV or 2.5 A

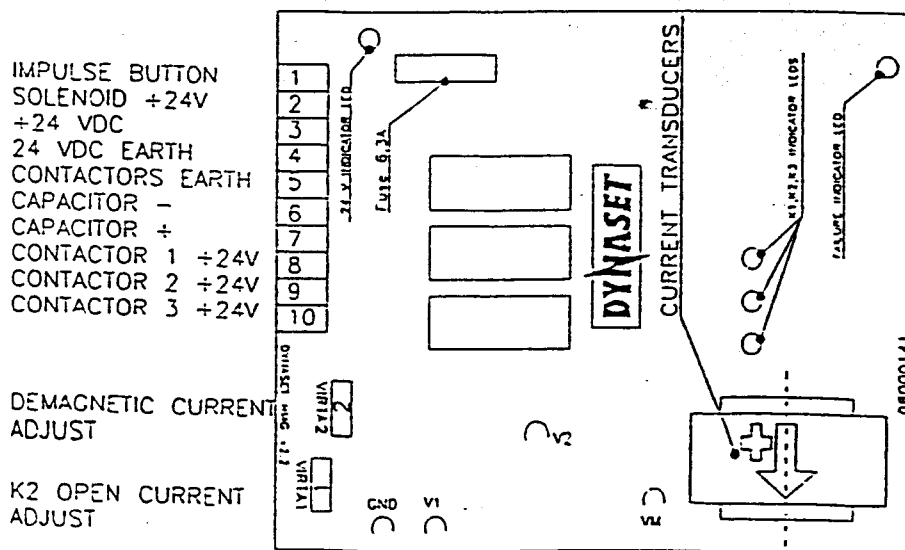
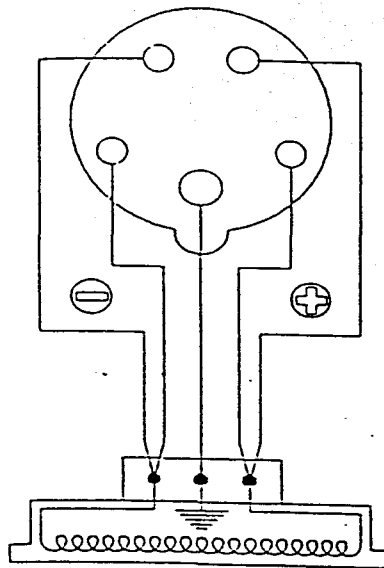


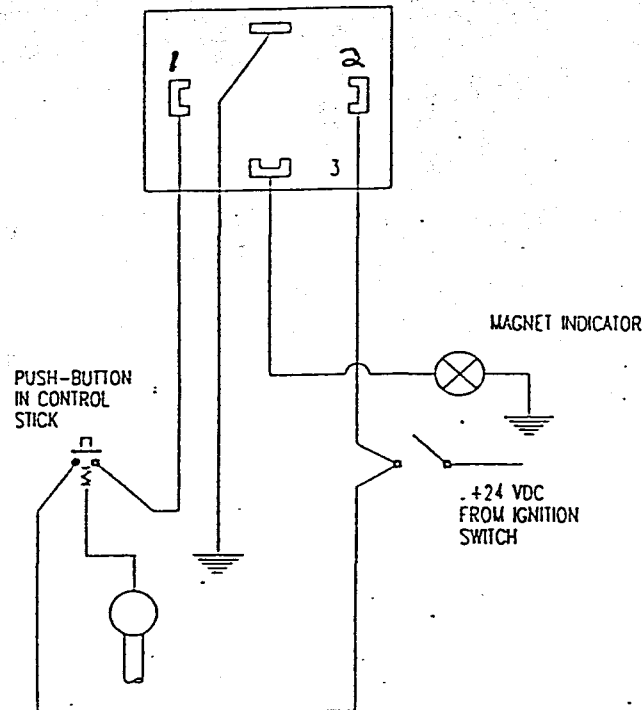
DIAGRAM OF CONNECTION BASIC SYSTEM WITH NO PRIORITY VALVE

Electric:

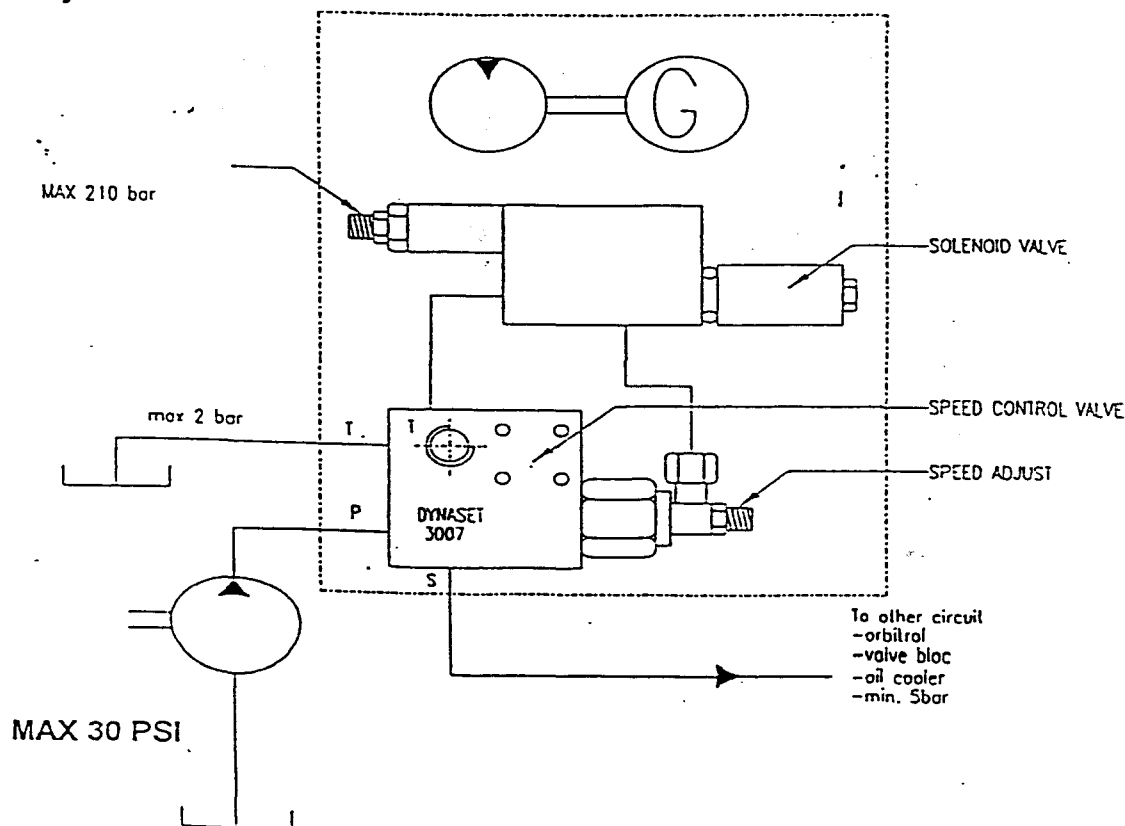
CONNECT OF MAGNET 220 VDC



CONNECT OF CONTROL 24 VDC



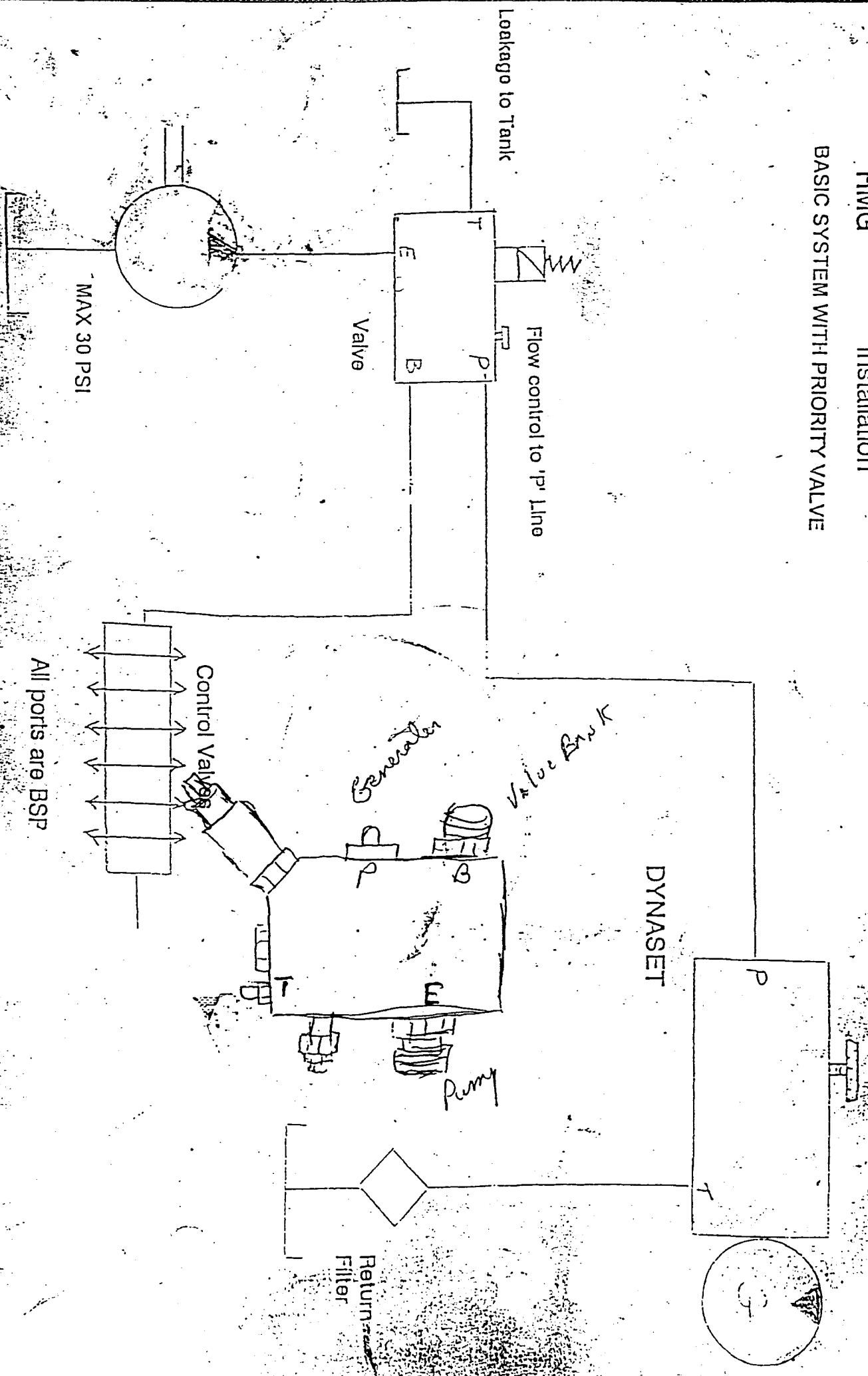
Hydraulics:



This is the system we used on the [unclear] system

HMG Installation

BASIC SYSTEM WITH PRIORITY VALVE



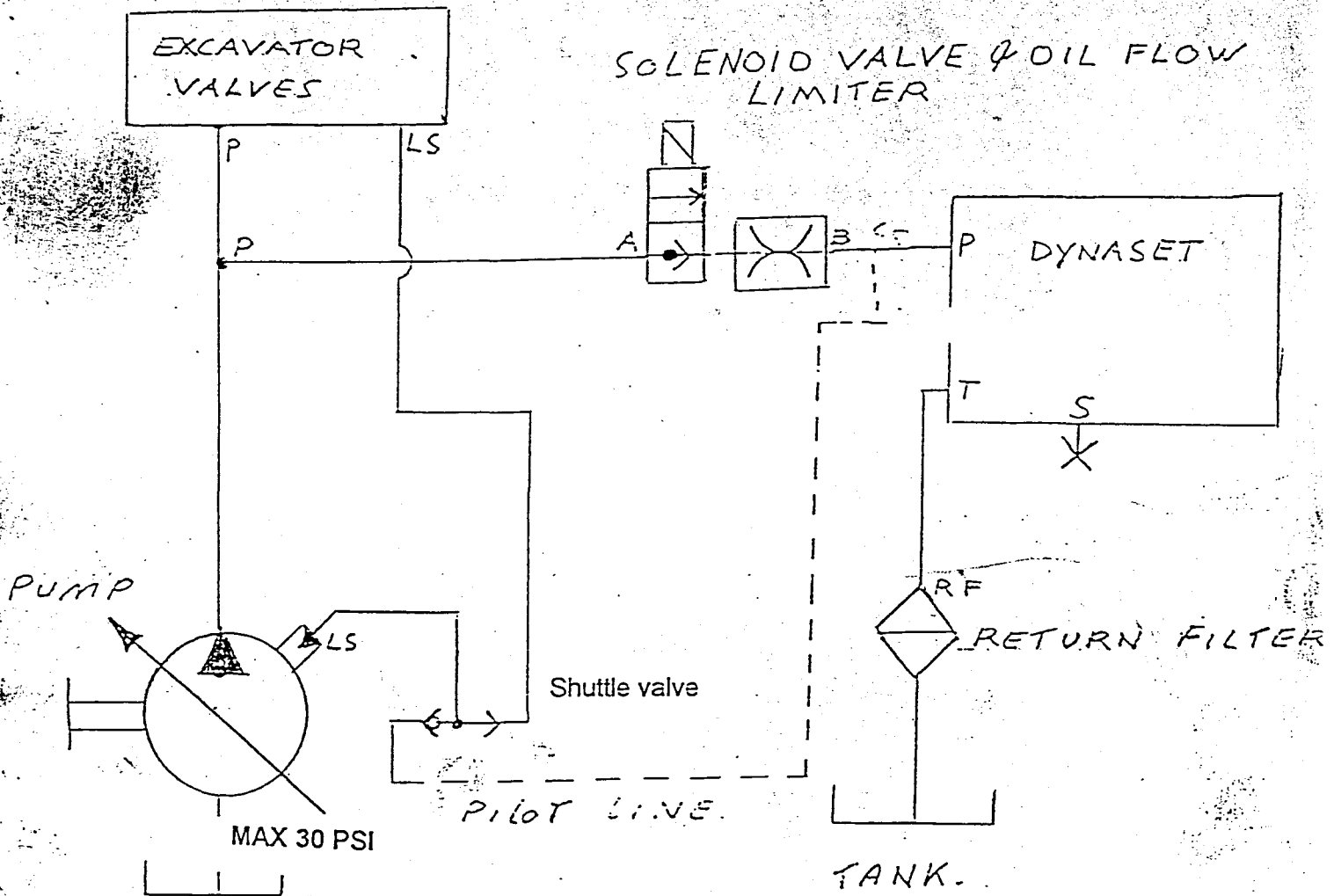
3/30

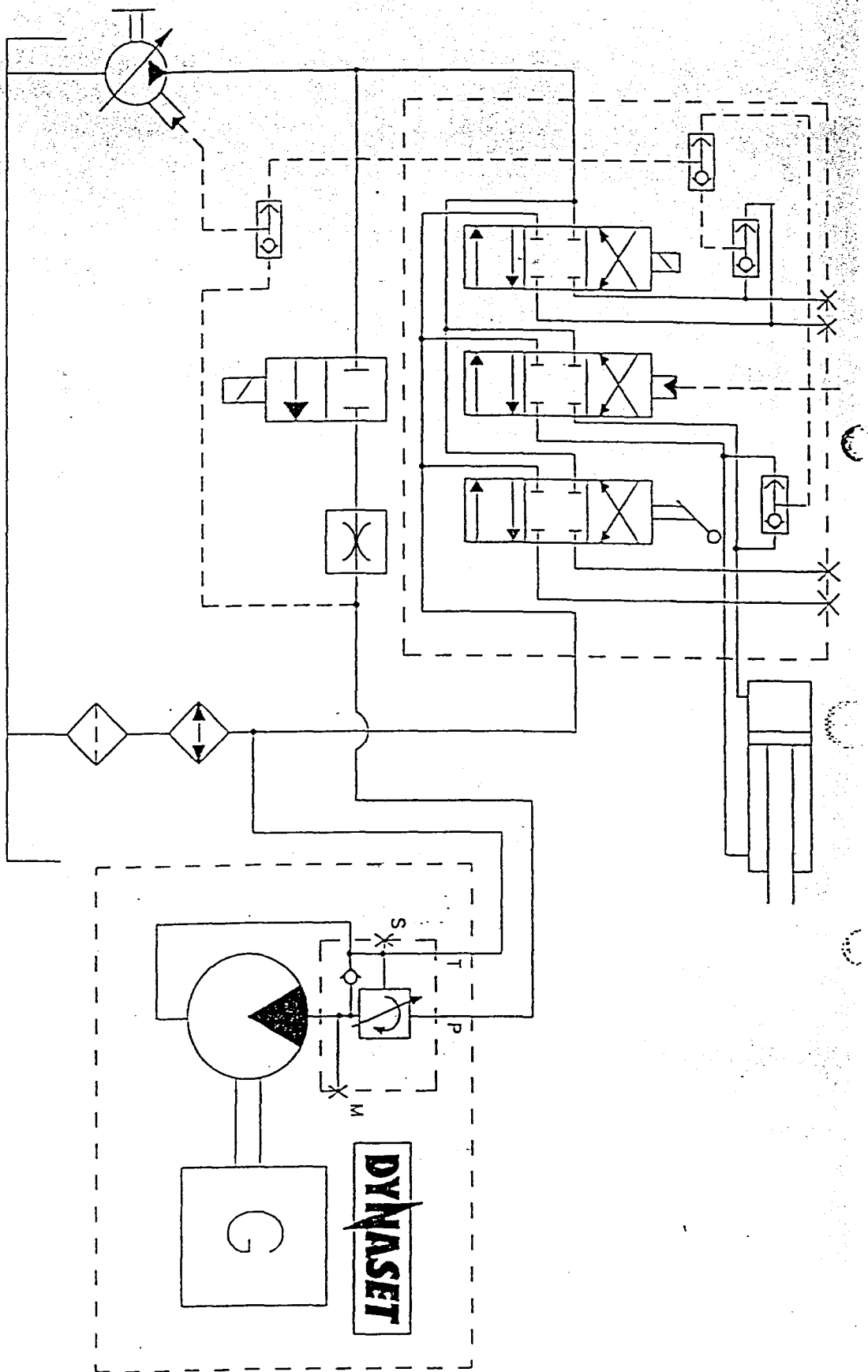
3/31

~~Load sensor set to 1500 so magnet would not~~

~~Didn't drop load when swinging~~

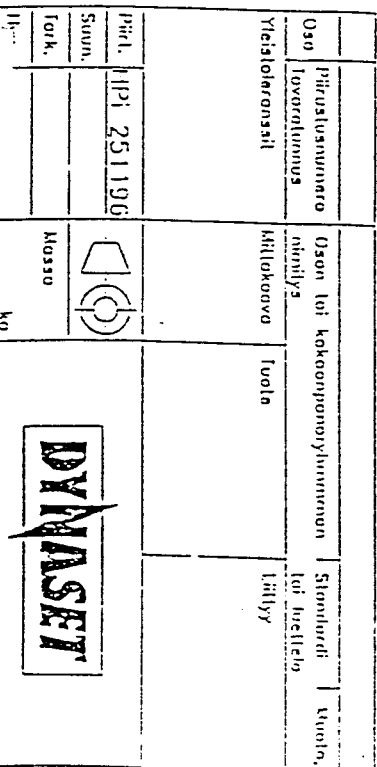
GENERAL SCHEMATIC FOR INSTALLATION
ON MACHINE WITH LOAD SENSING SYSTEM
A priority valve can be installed if required.





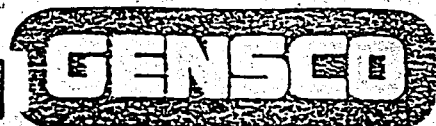
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Tovariluvus		Tovariluvus		Tovariluvus		Tovariluvus		Tovariluvus		Tovariluvus		Tovariluvus	
Yleisluokitus		Yleisluokitus		Yleisluokitus		Yleisluokitus		Yleisluokitus		Yleisluokitus		Yleisluokitus	
Pilt.		HP1 251196		Pilt.		Pilt.		Pilt.		Pilt.		Pilt.	
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Tork.		"		Tork.		Tork.		Tork.		Tork.		Tork.	
Hyv.		"		Hyv.		Hyv.		Hyv.		Hyv.		Hyv.	
Mitoitus		Mitoitus		Mitoitus		Mitoitus		Mitoitus		Mitoitus		Mitoitus	
kg		kg		kg		kg		kg		kg		kg	
DYNASET		DYNASET		DYNASET		DYNASET		DYNASET		DYNASET		DYNASET	
Enl.		Enl.		Enl.		Enl.		Enl.		Enl.		Enl.	
09000172		09000172		09000172		09000172		09000172		09000172		09000172	

Variable displacement pump
with load sensing system

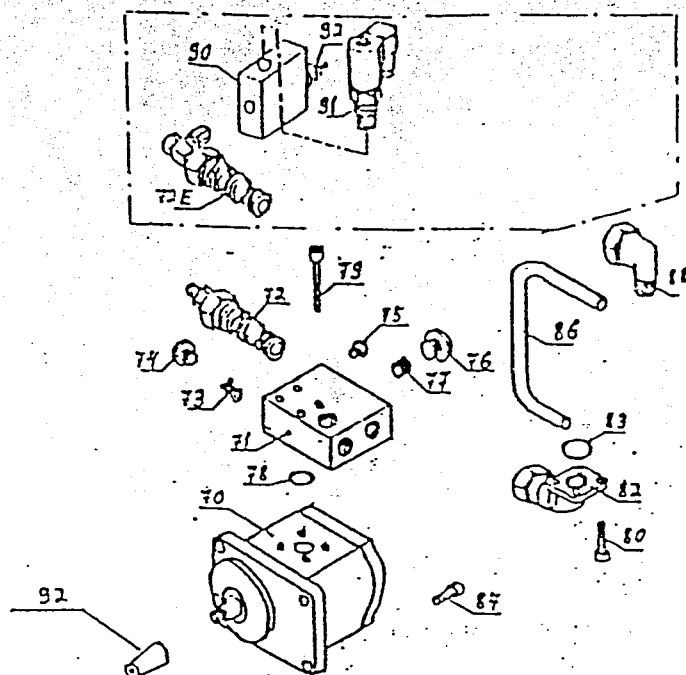


Cost.

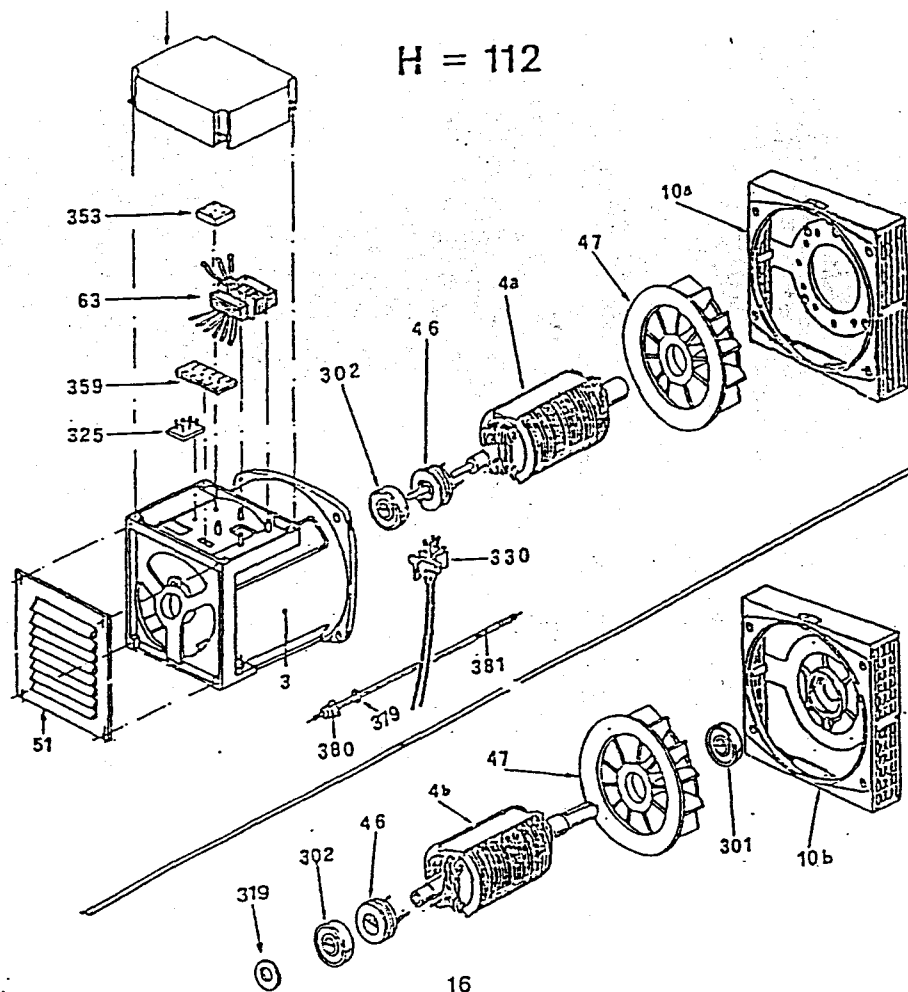
(0530)(00174)



HYDRAULIC SPARE PARTS



- | | |
|-----|-----------------|
| 70 | Hydraulic motor |
| 70a | Seal kit |
| 70b | Axle seal |
| 70c | Valve block |
| 71 | Catridgevalve |
| 71e | Catridgevalve |
| 73 | Valve |
| 74 | Plug |
| 75 | Plug |
| 76 | Plug |
| 77 | Plug |
| 78 | O-ring |
| 79 | Screw |
| 82 | Flangejoint |
| 83 | O-ring |
| 84 | Screw |
| 86 | Pipe |
| 88 | Joint |
| 90 | Valve block |
| 91 | Catridgevalve |
| 92 | Coupling cone |



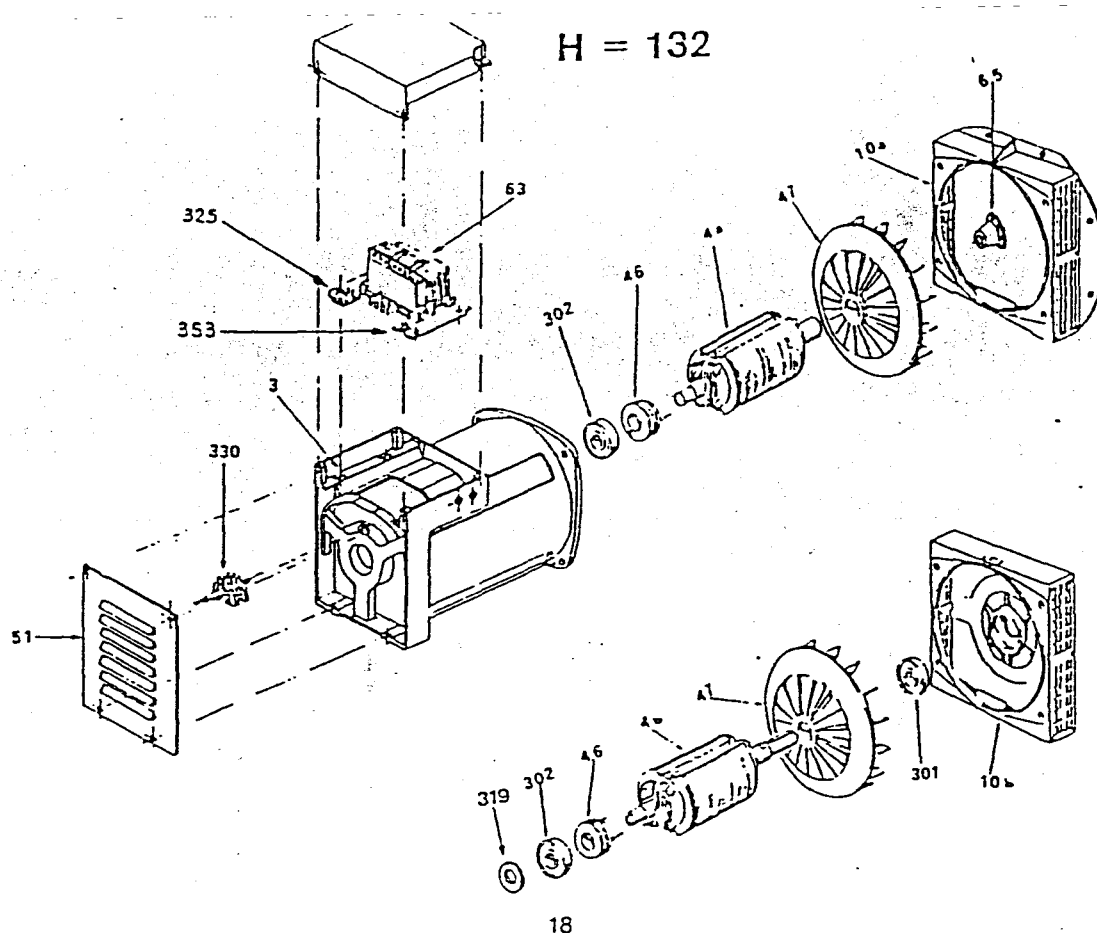
H = 112

DESIGNAZIONE PARTI DI RICAMBIO
DESIGNATION OF THE SPARE-PARTS
DÉSIGNATION DES PIÈCES DE RECHANGE

H = 112

6.5/10 KW Models

N.	DESCRIZIONE	DESCRIPTION	DESCRIPTION
3	CASSA CON STATORE	FRAME WITH STATOR	CARCASSE AVEC STATOR
4	a ROTORE B9	B9 ROTOR	ROUE POLAIRE B9
	b ROTORE B14	B14 ROTOR	ROUE POLAIRE B14
10	a SCUDO L.A. B9	B9 D.E. SHIELD	FLASQUE CÔTÉ PRISE B9
	b SCUDO L.A. B14	B14 D.E. SHIELD	FLASQUE CÔTÉ PRISE B14
46	COLLETTORE AD ANELLI	SLIP RING	COLLECTEUR
47	VENTOLA	FAN	VENTILATEUR
51	PROTEZIONE LATO OPP. ACCOPP.	O.D.E. PROTECTION	PROTECTION CÔTÉ OPPOSÉ PRISE
54	COPERCHIO SCATOLA MORSETTI	TERMINAL BOARD COVER	COUVERCLE DE LA BOÎTE À BORNES
63	a COMPOUND TRIFASE	THREE-PHASE COMPOUND	TRASF. DE COMPOUNDAGE TRIPHASÉ
	b COMPOUND MONOFASE	SINGLE-PHASE COMPOUND	TRASF. DE COMPOUNDAGE MONOPHASÉ
301	CUSCINETTO LATO ACCOPP.	D.E. BEARING	ROULEMENT CÔTÉ PRISE
302	CUSCINETTO LATO OPP. ACCOPP.	O.D.E. BEARING	ROULEMENT CÔTÉ OPPOSÉ PRISE
319	RONDELLA DI SPESSORAMENTO	SPACE WASHER	RONDELLE D'ÉPAISSEUR
325	MORSETTIERA PRINCIPALE	MAIN TERMINAL BOARD	BOÎTE À BORNES PRINCIPALE
330	PORTASPAZZOLE CON SPAZZOLE	BRUSH HOLDER WITH BRUSHES	PORTE-BALAI AVEC BALAIS
353	PONTE A DIODI	RECTIFIER BRIDGE	PONT DE DIODES
359	MORSETTIERA DEL COMPOUND	COMPOUND TERMINAL BOARD	BOÎTE À BORNES DU COMPOUND
379	RONDELLA	WASHER	RONDELLE
380	DADO AUTOBLOCC. PER TIRANTE	SELF-LOCKING NUT FOR TIE-ROD	ÉCROU AUTOBLOQ. POUR LA TIGE
381	TIRANTE	TIE-ROD	TIGE CENTRALE



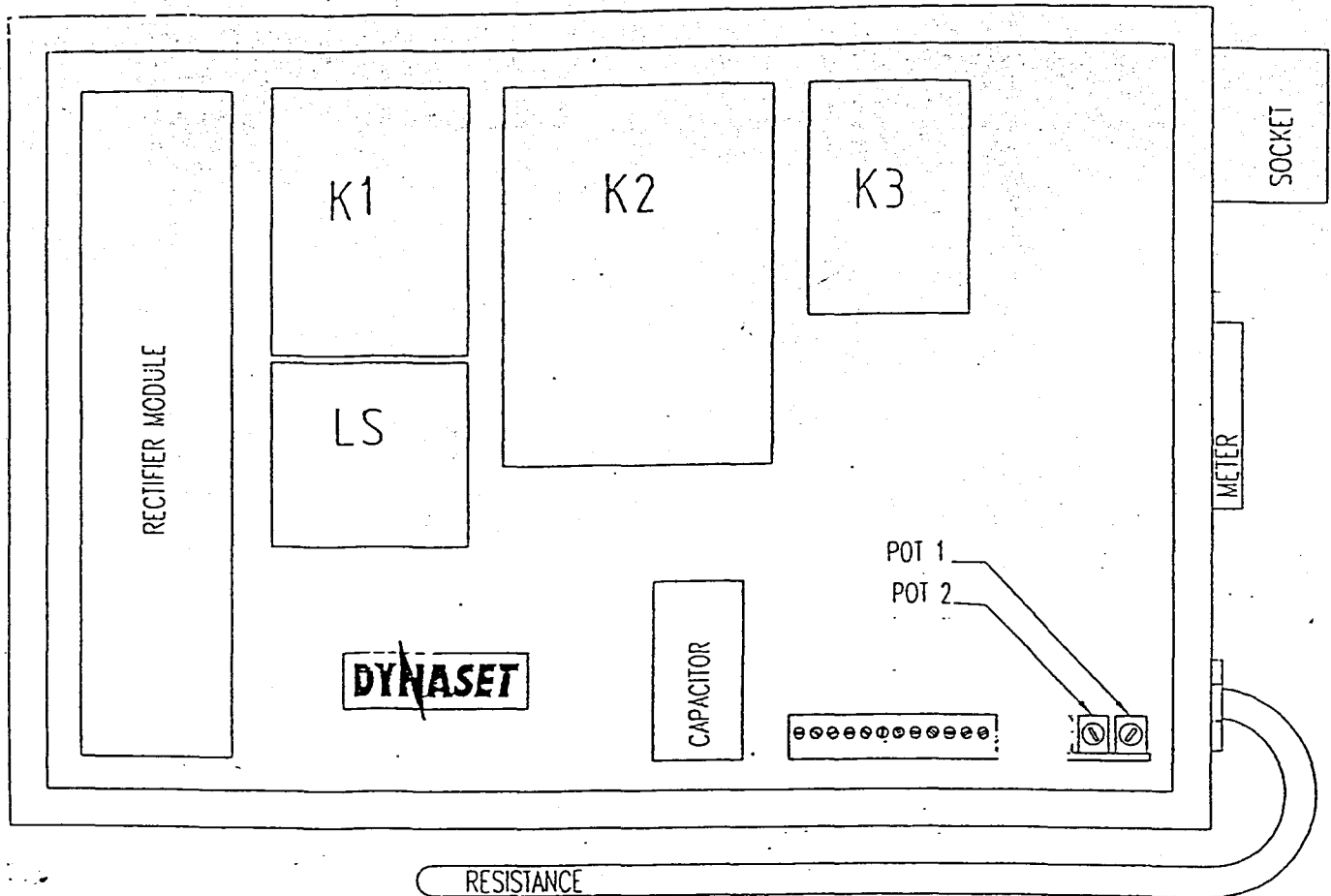
DESIGNAZIONE PARTI DI RICAMBIO
DESIGNATION OF THE SPARE-PARTS
DÉSIGNATION DES PIÈCES DE RECHANGE

H = 132 12/15/20 KW Models

N.	DESCRIZIONE	DESCRIPTION	DESCRIPTION
3	CASSA CON STATORE	FRAME WITH STATOR	CARCASSE AVEC STATOR
4 a	ROTORE B2	B2 ROTOR	ROUE POLAIRE B2
4 b	ROTORE B14	B14 ROTOR	ROUE POLAIRE B14
10 a	SCUDO L.A. B2	B2 D.E. SHIELD	FLASQUE CÔTÉ PRISE B2
10 b	SCUDO L.A. B14	B14 D.E. SHIELD	FLASQUE CÔTÉ PRISE B14
46	COLLETTORE AD ANELLI	SLIP RING	COLLECTEUR
47	VENTOLA	FAN	VENTILATEUR
51	PROTEZIONE LATO OPP. ACCOPP.	O.D.E. PROTECTION	PROTECTION CÔTÉ OPPOSÉ PRISE
54	COPERCHIO SCATOLA MORSETTI	TERMINAL BOARD COVER	COUVERCLE DE LA BOÎTE À BORNES
63	COMPOUND TRIFASE	THREE-PHASE COMPOUND	TRASF. DE COMPOUNDAGE TRIPHASÉ
301	CUSCINETTO LATO ACCOPP.	D.E. BEARING	ROULEMENT CÔTÉ PRISE
302	CUSCINETTO LATO OPP. ACCOPP.	O.D.E. BEARING	ROULEMENT CÔTÉ OPPOSÉ PRISE
319	RONDELLA DI SPESSORAMENTO	SPACE WASHER	RONDELLE D'ÉPAISSEUR
325	MORSETTIERA PRINCIPALE	MAIN TERMINAL BOARD	BOÎTE À BORNES PRINCIPALE
330	PORTASPAZZOLE CON SPAZZOLE	BRUSH HOLDER WITH BRUSHES	PORTE-BALAI AVEC BALAIS
353	PONTE A DIODI	RECTIFIER BRIDGE	PONT DE DIODES

NOTE: On 20 KW models brushes are replaced by field generator.

SPARE PARTS



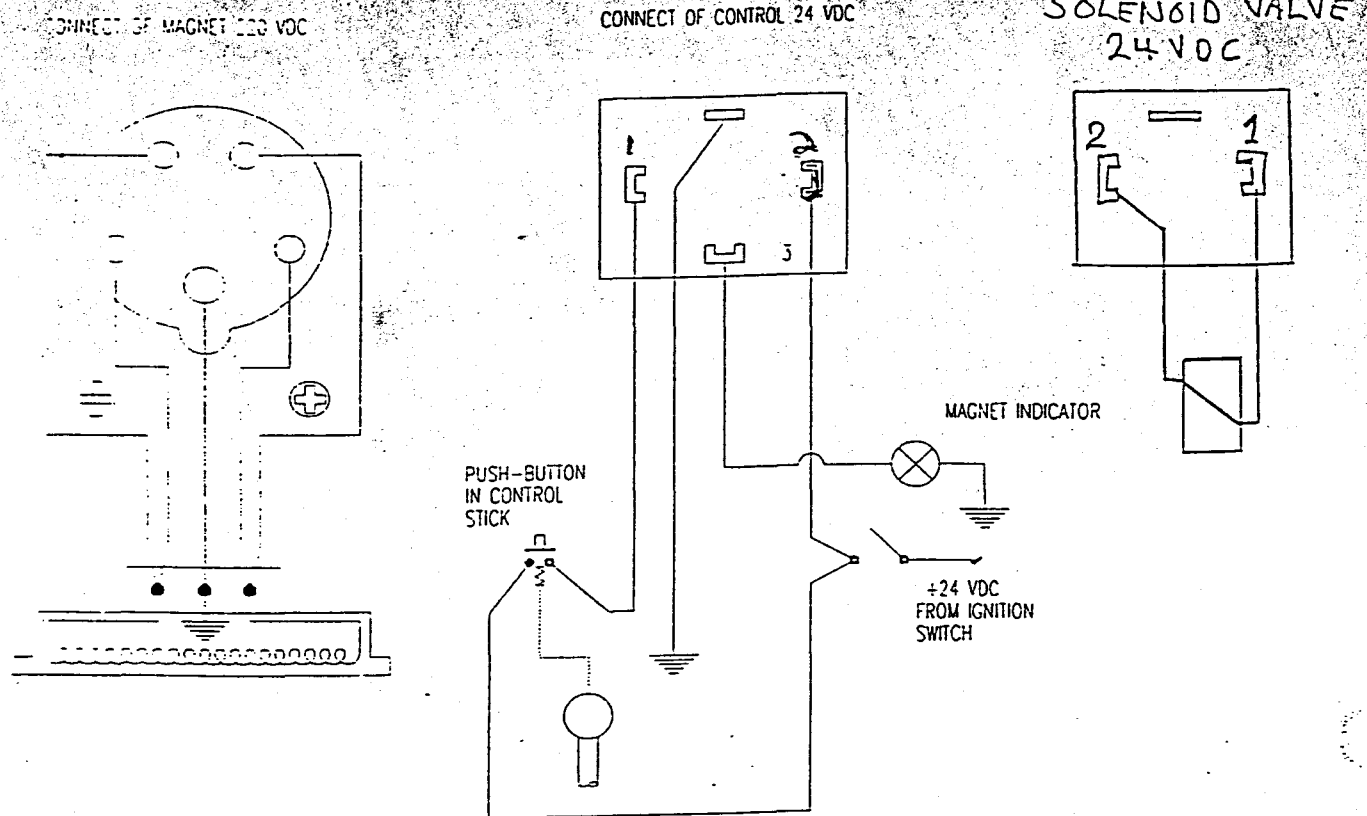
Rectifier module

diode set
cooling profile
insulating plate

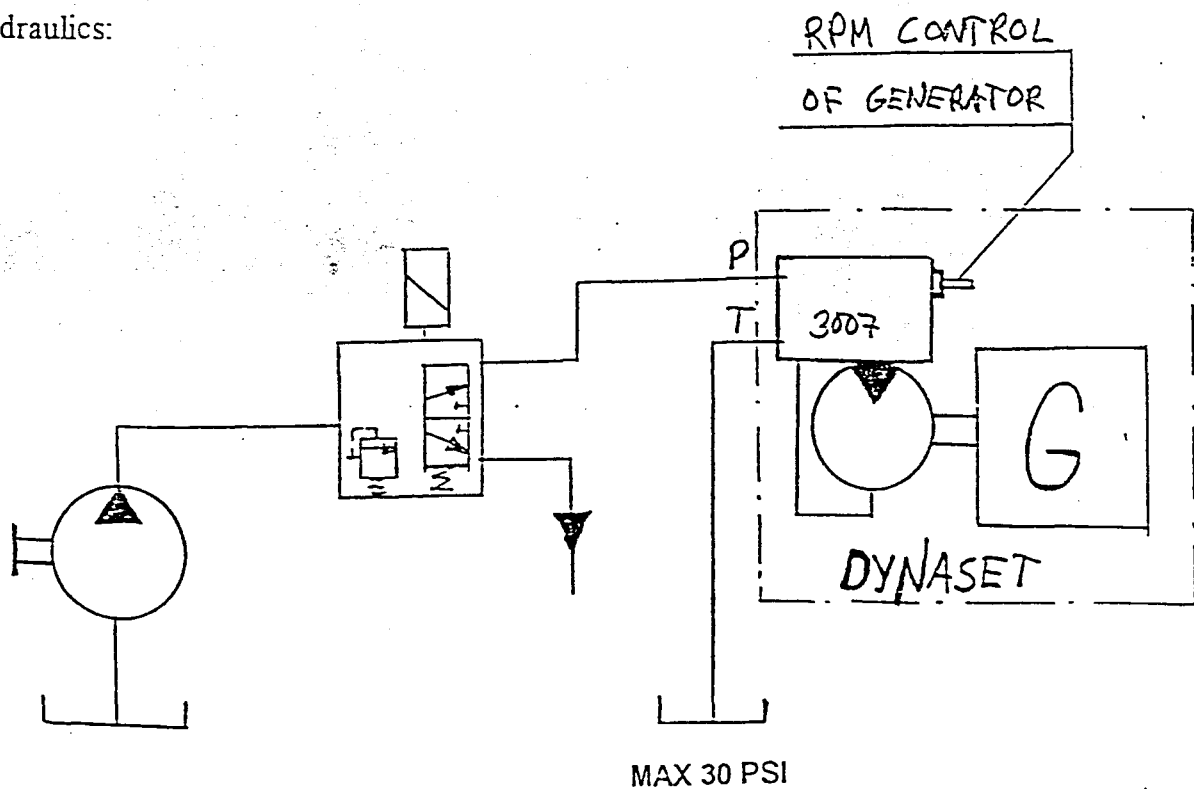
Contactor K1
Contactor K2
Contactor K3
Overload protection LS
Capacitor
Driver card PC
Resistance
Meter
Socket

DIAGRAM OF CONNECTION BASIC SYSTEM WITH PRIORITY VALVE

Electric:

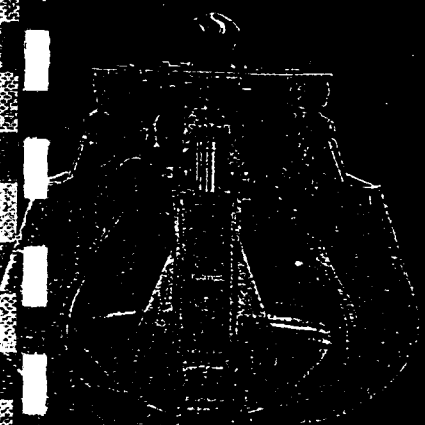


Hydraulics:



GENSCO PRODUCTS

Since 1919, GENSCO... Suppliers of quality products and services to the scrap and steel industries



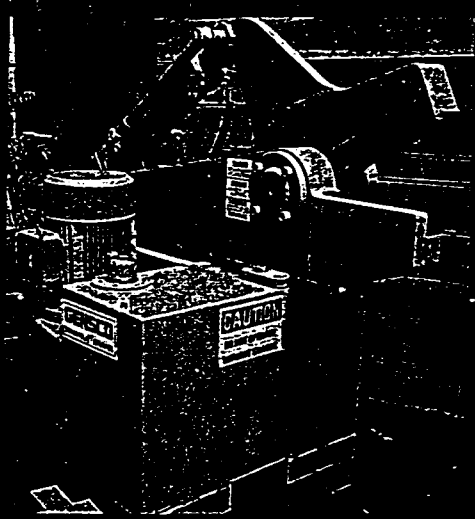
Hydraulic Grapples



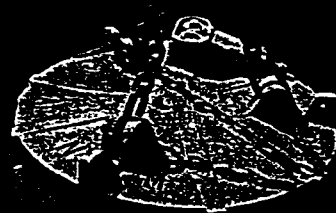
Combination Grapples with Magnets



Cable Strippers



Hyd. Metal Cleaning Shears



Magnets



Mercury 40 Baler



Balers

SUPPLIERS OF NEW AND USED EQUIPMENT

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