

SAC SARTORI s.r.l.

COSTRUZIONI ATTREZZATURE PER PARCHI DIVERTIMENTO

PLANET FUN

USA-ID# 4647

SER# - 6367

(SPACE - DRUMS)
DRUMS CIRCUS

MOD. RS/367

CARNY TOWN.COM

MANUAL BOOK FOR OPERATION AND MAINTENANCE

TECHNICAL DATA

DRUMS CIRCUS

| | |
|-----------------------|--------------------------------------|
| MOVING POWER | KW 1.1 |
| LIGHTING | KW 2 |
| FREQUENCY | 60 Hz |
| ROTATION SPEED | 5/6 R.P.M. APPROX |
| VEHICLES | 6 |
| SEATS CAPACITY | 24/12 (4 KIDS or 1 ADULT & 1 KID) |
| DIAMETRE IN OPERATION | 5 MTS APPROX |

ORDINARY MAINTENANCE

DAYLY MAINTENANCE:

- a) CHECK IF ALL SAFETY PLUGS HAVE A SAFETY SPLIT PIN ON THEIR TOP; REPLACE THEM IF FAILING.
- b) CHECK IF ALL ELECTRIC PLUGS AND OUTLETS ARE CORRECTLY CONNECTED.

WEEKLY MAINTENANCE:

- a) CHECK THE PRESENCE OF A SUFFICIENT OIL QUANTITY IN THE TANK AS WELL, THROUGH THE SIGNAL ON THE SCREW PLUG. FILL IT UP IF NECESSARY.

PLEASE NOTE: YOU MUST CHANGE THE OIL IN THE TANK EVERY 500 WORKING HOURS

- b) GREASE THE COG BEARING AND THE PINION THROUGH THE FATTENER.
- c) GREASE THE HEAD OF THE HYDRAULIC LIFTING CYLINDER.

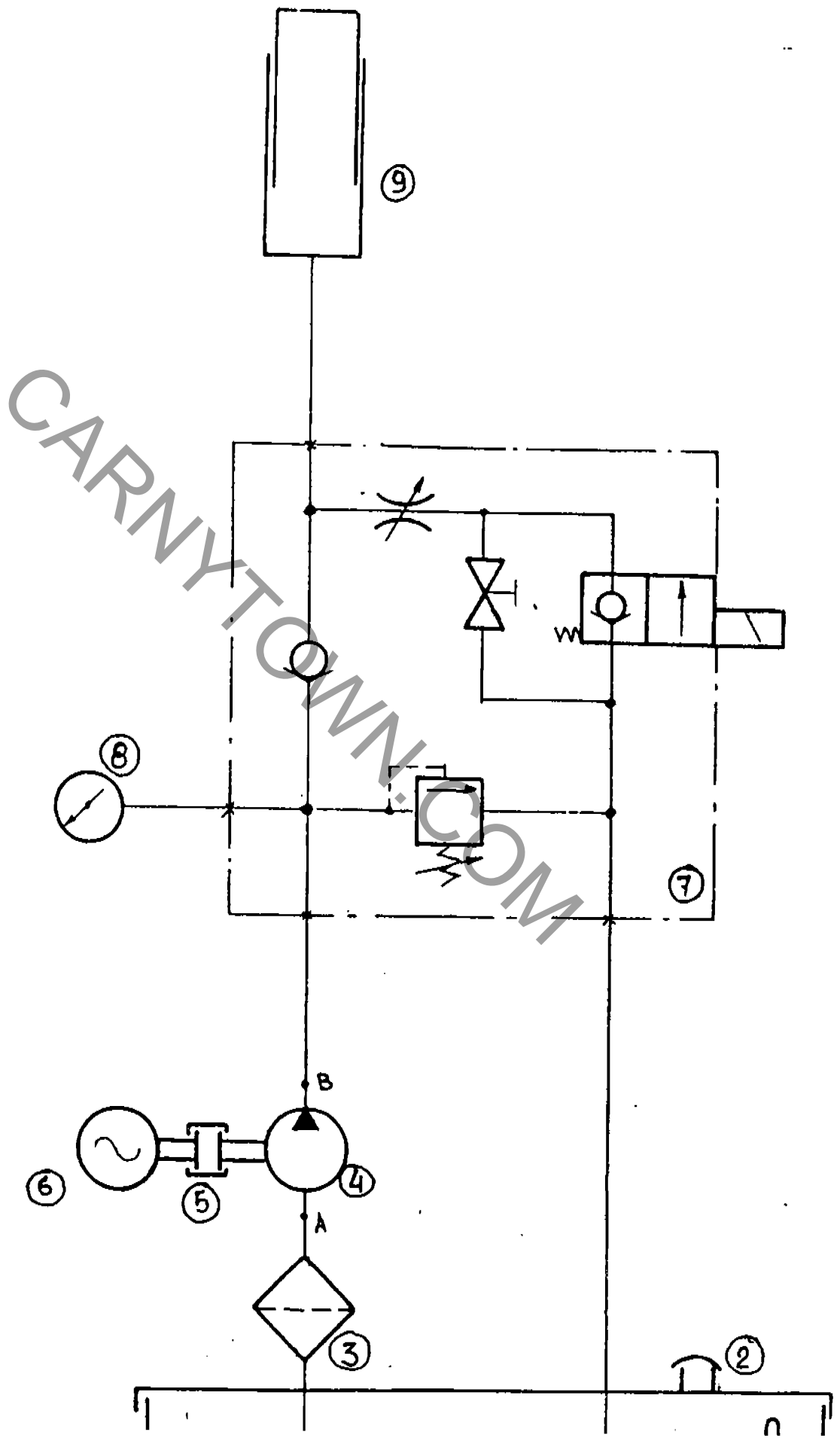
IT IS STRONGLY ADVISED TO USE ONLY THE GREASES RECOMMENDED IN THE ENCLOSED LIST.

- d) IT IS ALSO ADVISABLE TO CHECK PERIODICALLY THE STRESS OF THE ROTATION DRIVING BELT. IF ONE OF THESE BELTS IS NOT CORRECTLY TIGHTENED, FIX IT AGAIN.

PERIODICALLY CHECK IF ALL THE SAFETY SPLIT PINS ARE AT THEIR PLACE OR IF THE BOLTS OF THE ATTRACTION ARE LOOSENED.

ATTENTION!! ALL MAINTENANCE OPERATIONS MUST BE CARRIED OUT BY QUALIFIED PEOPLE AND THERE MUST NOT BE ANY ELECTRICAL POWER.

HYDRAULIC SYSTEM



LIST OF HYDRAULIC SYSTEM COMPONENTS

- 1) OPTIC LEVEL 1/2"
- 2) OUTLET PLUG 3/4
- 3) FILTER MPA 30/90
- 4) PUMP CPL 9 D.
- 5) FLEXIBLE COUPLING HE 14
- 6) ELECTRIC ENGINE 2 Hp 220 60Hz
- 7) COMBINATED VALVE VEB/VMP/VUI - SB38 NC 110V CA
- 8) RADIAL MANOMETER - DIAM. 63 315
- 9) CYLINDER S.E. - 1/2"
- A) INTERNAL JOINT 30 - 1/2"
- B) INTERNAL JOINT 30 - 1/8"

| FIRM | For a normal use at environment temperature from -50° to +400° | | For a difficult use, operation at environment temperature from +300° to +500° | |
|--------------------------------------|---|--------------------------------------|--|---------------------------------------|
| | Viscosity ISO VG 68 (DIN 51519) | | Viscosity ISO VG 100 (DIN 51519) | |
| | H-L (DIN 51524) | H-LP (DIN 51525) | H-L (DIN 51524) | H-LP (DIN 51525) |
| AERO-LINE STAR (Prinz-Schulte KG) | AERO-LINE H 68 | AERO-LINE Torqmatic Fluid 5 | AERO-LINE H 100 | AERO-LINE Torqmatic Fluid 5 |
| AGIP | SIC 68 | OSO 68 | SIC 100 | OSO 100 |
| ARAL | Vitam UF 68 | Vitam GF 68 | Vitam UF 100 | Vitam GF 100 |
| AVIA | AVIALUB Hydr.-01 RL 68 | AVILUB Hydr.-01 RSL 68 | AVILUB Hydr.-01 RL 100 | AVILUB Hydr.-01 RSL 100 |
| BP | BP Energol RC 68 | BP Energol HLP 68 | BP Energol RC 100 | BP Energol HLP 100 |
| BRENNTAG | Hydrauliköl F | Turboid F | Hydrauliköl H | Turboid H |
| Calypsol | Hydrauliköl HLP 68 | Hydrauliköl HLP 68 | Hydrauliköl HLP 100 | Hydrauliköl HLP 100 |
| Castrol | HYSPIN VG 68 | HYSPIN AWS 68 | HYSPIN VG 100 | HYSPIN AWS 100 |
| CHEMFA | Chemfol GP 68 | Chemfol GP 68 | Chemfol GP 100 | Chemfol GP 100 |
| CHEVRON | Hydraulic Oil 68 | EP Hydraulic Oil 68 | Hydraulic Oil 100 | EP Hydraulic Oil 100 |
| CONDOR | Hydor 68 Hydrauliköl H-L 68 | CONDORANT EMK Hydrauliköl H-LP 68 | Hydor 100 Hydrauliköl H-L 100 | CONDORANT EMO Hydrauliköl H-LP 100 |

| FIRMA | For a normal use at environment temperature from -50° to +400° | | For a difficult use, operation at environment temperature from +300° to +500° | |
|--------------------------------|---|-------------------------------|--|------------------------------------|
| | Viscosity ISO VG 68 (DIN 51519) | | Viscosity ISO VG 100 (DIN 51519) | |
| | H-L (DIN 51524) | H-LP (DIN 51525) | H-L (DIN 51524) | H-LP (DIN 51525) |
| ECUBSOL (Wenzel & Weidmann) | ECUBSOL OEL RK 68 | ECUBSOL OEL HYM | ECUBSOL OEL RK 100 | ECUBSOL OEL HYS |
| ELF UNION | ELF POLYTELIS 68 | ELF ACANTIS 68 ELF OLNA 68 | ELF POLYTELIS 100 | ELF ACANTIS 100 ELF OLNA 100 |
| ESSO | ESSTIC 68 | NU TO H 68 | ESSTIC 100 | NU TO H 100 |
| FINA | FINA CIRKAN 68 | FINA HYDRAN 68 | FINA CIRKAN 100 | FINA HYDRAN 100 |
| FUCHS | RENOLIN B 20 RENOLIN MR 20 | RENOLIN B 20 RENOLIN MR 20 | RENOLIN B 30 RENOLIN MR 30 | RENOLIN B 30 RENOLIN MR 30 |
| GULF | HARMONY 68 | HARMONY 68 AW | HARMONY 100 | HARMONY 100 AW |
| LÜBER LUBRICATION | CRUCOLAN 68 | LAMORA HLP 68 | CRUCOLAN 100 | LAMORA HLP 100 |
| MARTIN | LIGOMAR 68 MZK | LIGOMAR 47 EP | LIGOMAR 100 MZK | LIGOMAR 64 EP |
| MIHAG | CD 68 | HS 68 | CD 100 | HS 100 |
| MOBIL | MOBIL D.T.E. OIL HEAVY MEDIUM | MOBIL D.T.E. 26 | MOBIL D.T.E. OIL HEAVY | MOBIL D.T.E. 27 MOBIL D.T.E. 18 |

| FIRM | For a normal use at environment temperature from -50° to +40C° | | For a difficult use, operation at environment temperature from +30C° to +50C° | |
|---------------|---|---|--|--|
| | Viscosity | | Viscosity | |
| | H-L (DIN 51524) | ISO VG 68 (DIN 51519) H-LP (DIN 51525) | H-L (DIN 51524) | ISO VG 100 (DIN 51519) H-LP (DIN 51525) |
| LUB-ALLOY | MA-01 604= H-LP mit Festschmierstoffen | MA-01 604= H-LP mit Festschmierstoffen | MA-01 605= H-LP mit Festschmierstoffen | MA-01 605= H-LP mit Festschmierstoffen |
| NTAN-UNION | ISO-HLP 68 | ISO-HLP 68 | ISO-HLP 100 | ISO-HLP 100 |
| ST | OEST Hydrauliköl H-L 68 | OEST Hydrauliköl H-LP 68 | OEST Hydrauliköl H-L 100 | OEST Hydrauliköl H-LP 100 |
| timol | Optimol Hydo 5065 VG 68 Optimol Hydo MV 5065 VG 68 | Optimol Hydo 5065 VG 68 Optimol Hydo MV 5065 VG 68 | Optimol Hydo 5095 VG 100 | Optimol Hydo 5095 VG 100 |
| ell | Shell Tellus Oel C 68 | Shell Tellus Oel 68 | Shell Tellus Oel C 100 | Shell Tellus Oel 100 |
| N OIL C° | Sunvis 931 (ISO 68) | Sunvia 831 (ISO 68) | Sunvis 951 | Sunvis 851 |
| XACO | Rando Oil 68 | Rando Oil HD C-68 Rando Oil HD CZ-68 | Rando Oil 100 | Rando Oil HD E-100 |
| TAL | TOTAL Reo 68 | TOTAL Azolla 68 | TOTAL Reo 100 | TOTAL Azolla 100 |
| adol | Andarin 55 | Andarin 55 | Andarin 60 | Andarin 60 |
| SURA | Dynex 68 | WISURA Tempo 68 WISURA Hydrona 68 | Dynex 100 | WISURA Tempo 100 WISURA Hydrona 100 |
| ller + Gmelin | ZG GWA 3 ISO 68 | ZG HLP 68 ZG DHG 68 | ZG GWA 4 ISO 100 | ZG HLP 100 ZG DHG 100 |

| GREASES | FIRM | Grease | |
|---------|------|------------------------------|----------------------------|
| | | • | ▲ |
| ARAL | ARAL | • Aralub HL 2 | ▲ Aralub LFZ 1 |
| | | • BP Energrease LS 2 | ▲ BP Energol WRL |
| B.P. | B.P. | • Castrol Spherol AP 2 | ▲ Castrol Grippa 33 S |
| | | • Chevron Dura-Lith Grease 2 | ▲ Chevron Pinion Grease MS |
| ESSO | ESSO | • BEACON 2 | ▲ SURETT Fluid 4 K |
| | | • GULF CROWN Grease No.2 | ▲ GULF LUBCOTE No.2 |

TROUBLE SHOOTING HINTS

1) THE RIDE DOESN'T WORK CORRECTLY OR CONTROL BUTTONS DO NOT WORK:

CHECK THE POWER AND THE CONTROL FUSES IN THE GENERAL BOARD. REPLACE THEM IF NECESSARY.

2) THE RUNNING FLASHING LIGHTS DON'T WORK AT ALL OR DON'T WORK CORRECTLY

CHECK THE FUSES OF THE ELECTRIC BOARD PLACED INSIDE THE CENTRAL BALL OF THE RIDE. YOU CAN REACH THEM FROM THE UPPER SIDE OF THE ATTRACTION. FURTHERMORE CHECK IF ANY BULB IS NOT WORKING AND REPLACE IT IF NECESSARY.

3) THE VEHICLE LIGHTS OR SOUND DO NOT WORK

CHECK THE FUSES INSIDE THE FUSES BLOCK, WHICH MAY BE OPENED THROUGH A "BAYONET" SYSTEM. REPLACE THEM IF NECESSARY.

4) THE DESCENT OF THE LIFTING ARM IS TOO QUICK OR TOO SLOW

YOU CAN EASILY OBVIATE TO THIS TROUBLE: ADJUST THE MANUAL DESCENT REGULATOR PLACED INSIDE THE DOME AND COMING OUT FROM THE OIL TANK. TO THIS PURPOSE LOOSEN THE RING NUT AND TURN THE MANDREL CLOCKWISE OR ANTI-CLOCKWISE ACCORDING TO YOUR NEEDS. THEN FIX THE RING NUT AGAIN.

ATTENTION!

FOR ANY OTHER PROBLEM NOT SOLVABLE WITH THIS MANUFAL PLEASE CALL US: OUR TECHNICIANS ARE AT YOUR COMPLETE DISPOSAL.

OPERATING INSTRUCTIONS

TO START THE RIDE YOU HAVE TO:

FIRST TURN ON THE GENERAL SWITCH OF THE GENERAL ELECTRIC BOARD. SWITCH ON THE THREE-POLES SWITCH OF THE ENGINE. SWITCH ON THE TWO-POLES SWITCHES OF THE DIFFERENT LIGHTING LINES. NOW THE RIDE IS ELECTRICALLY READY TO START.

TO START THE RIDE JUST TO PRESS THE BLACK BUTTON "START". TO STOP THE RIDE YOU SIMPLY HAVE TO PRESS THE RED BUTTON "STOP". THE ROUND MAY BE DETERMINED THROUGH THE TIMER THAT YOU CAN SEE ON THE CONTROL BOARD AND WHICH IS OPERATED BY THE BALL SWITCH (TIMER). THE TIMER HAS THREE SCALES (12 MINUTES, 60 SECONDS, 6 SECONDS). YOU MAY CHOOSE THE SCALE ACTING THROUGH A SMALL SCREWDRIVER ON ITS SCREW.

WARNING!

THE TIMER ACTS ONLY ON THE ROTATION OF THE RIDE BUT NOT ON THE DESCENT, WHICH MUST BE MADE MANUALLY.

IN CASE OF SUDDEN DANGER, PRESS THE RED BUTTON "EMERGENCY" WHICH COMPLETELY STOPS THE RIDE. TO START THE RIDE AGAIN IT IS NECESSARY TO TURN THE "EMERGENCY" BUTTON CLOCKWISE AND EVERYTHING WILL GO BACK TO NORMAL WORKING. THE CONTROL PANEL IS ALSO SUPPLIED WITH A GREEN BELL BUTTON THAT YOU SHOULD RING TO ADVISE THE RIDEGUESTS BEFORE THE ROUND STARTING.

GENERAL SAFETY REGULATIONS

1) INSTALLATION / DISMANTLING :

TO BE MADE ONLY BY QUALIFIED PERSONNEL. MAKE SURE THAT DURING THE FOLDING UP AND DOWN NOBODY STANDS CLOSED TO THE RIDE.

2) ELECTRIC SYSTEMS :

MAIN ELECTRIC CONNECTIONS AND THE GROUND MASS MUST BE MADE ONLY BY AUTHORIZED AND QUALIFIED PERSONNEL. DAILY CHECK TO AVOID ANY TAMPERING.

3) MECHANICAL PARTS :

ALL MAINTENANCE - INSPECTION INSTRUCTIONS OF THE MANUAL MUST BE STRICTLY OBSERVED.

4) OPERATION :

BEFORE STARTING THE RIDE, THE OPERATOR ENCHARGED MUST LET THE RIDE OPERATE EMPTY FOR A FEW MINUTES AND CHECK THAT ALL THE OPERATION SWITCHES (START/STOP/EMERGENCY) PERFECTLY WORK.

FURTHERMORE IT IS RECOMMENDED TO BE SURE THAT THE OPERATORS ARE CARAFUL AT THE AIM OF ASSURING RIDER'S SAFETY.

THIS RIDE HAS NOT BEEN DESIGNED FOR HANDICAPPED CHILDREN

IT IS ABSOLUTELY NECESSARY THAT RIDERS ARE SECURED WITH PROPER SAFETY STRINGS OR BELTS. IN THIS REGARDS THE OPERATOR IS OBLIGED TO CONTROL NOT ONLY IF RIDERS ARE PROPERLY SECURED BUT ALSO IF THE STRINGS ARE FIXED IN THE EMPTY VEHICLES IN ORDER TO AVOID THEIR HOOKING TO THE STRUCTURE.

BEFORE STARTING THE RIDE PRESS THE BELL BUTTON AND MAKE SURE NOBODY IS STADING INSIDE THE SAFETY FENCES AND THAT ALL PASSENGERS ARE SECURERLY SEATED AND FASTENED. SHOULD ANY PASSENGERS TRY TO STAND UP OR TO GET OFF DURING THE RIDE, THE OPERATOR MUST IMMEDIATELY PRESS THE **EMERGENCY** BUTTON. IT IS RECOMMENDED TO STRICTLY OBSERVE ALL INSTRUCTIONS IN ORDER TO ASSURE THE BEST PASSENGER'S SAFETY.

BESIDES THE ABOVE SPECIFIED REGULATIONS YOU MUST STRICTLY CONFORM WITH ALL LOCAL SAFETY REGULATIONS IN FORCE IN THE COUNTRY WHERE THIS RIDE OPERATES.