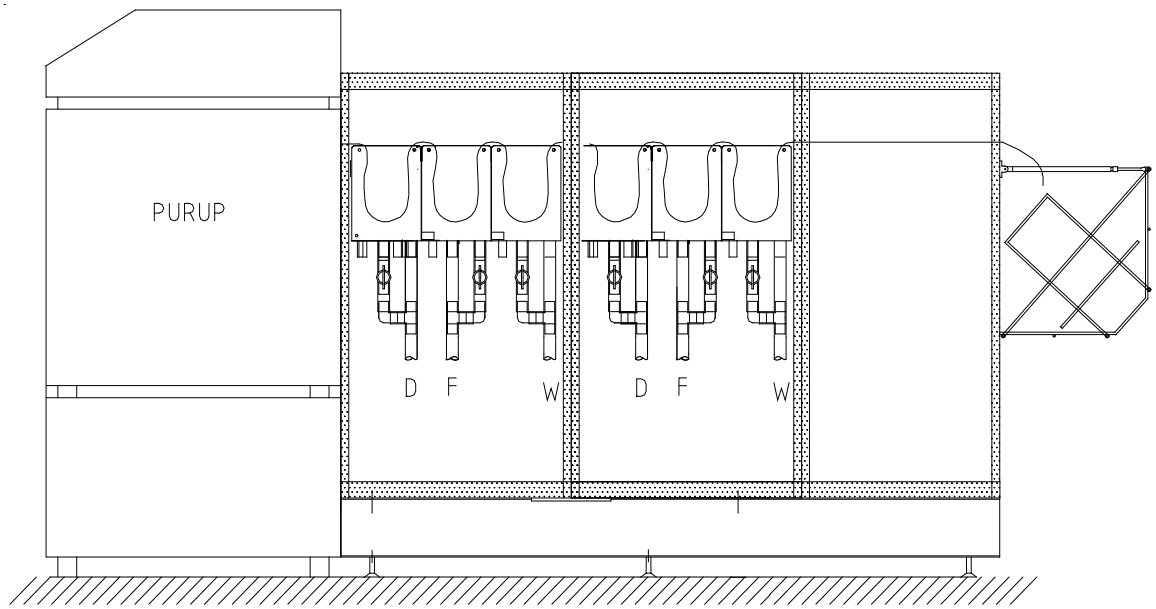
Important

Your on-line processor has a built in exhaust blower. Even if the main switch is switched off, the blower will still be on. This is to prevent chemical fumes in the ImageMaker. If a timer is connected in series with the main power cable, the machine has to be modified, so that the exhaust blower is always running.




**Purup-Eskofot**
**ImageMaker B1 / B2**

**Hope / Carnfeldt**
**EGP 901 for film and polyester plate**

**8.1 General**

This section contains the processor's basic operating instructions for working on-line with an ImageMaker.

Before operating the processor on-line, the procedures in Section Three Installation must be performed. Read this entire section and section four (Operation) before attempting to operate the processor.

**8.2 Installation of On-Line System**

Special care should be taken when the developer is connected to ImageMaker. It is advisable to install the ImageMaker first. The ImageMaker should be "levelled" and be put in to its final position before the developer is connected.

Install the processor as in section three. Level the processor in to its final position before Chemistry is added.

Connect the 25 interface cable. Trun power on and test the installation.

# Contents



SECTION 8

Edition: 3 August 2000
Product numbers:

**161470**
**320806**

**8.3 Introduction to the EGP Combi Processor**

The EGP Combi on-line processor is designed to work on-line for normal film and polyester plate in one and same processor. The processor is equipped with two developer sections - one for normal film and one for polyester plate. The processor has one common dryer section and one common input sensor.
Based on a signal from the ImageMaker the Combi on-line processor will guide the film/ polyester plate to the correct developer section in the processor. Refer to the drawing on the next page.

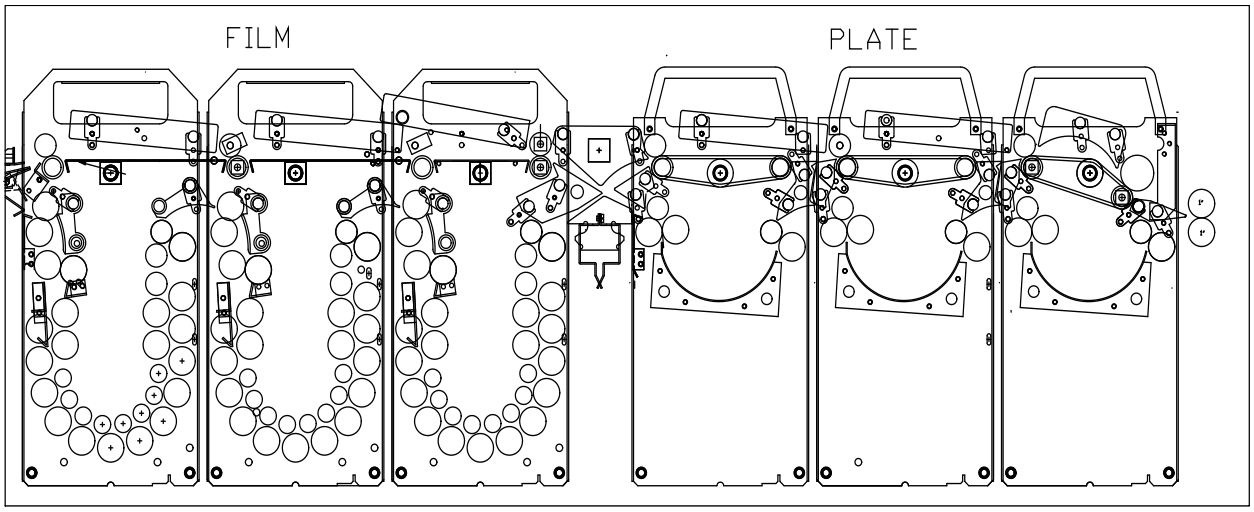
The EGP Combi on-line processor is equipped with two complete sets of the Celis Control electronics. One Celis Control is connected to the developer section for film and the other is connected to the developer section for polyester plates. In the following the film control will be called the **primary control** and the polyester plate control will be called the **secondary control.**

All communication with the ImageMaker goes through the interface board connected to the primary control, which again is connected to the secondary control through a serial communication cable.

When powering on the processor without material change signal (Ptosel.) from the ImageMaker activated, the processor will be in film mode. This means that the primary control is in charge of the ImageMaker communication, input sensor, the drive motor speed and the dryer temperature.

When the ImageMaker activates the material change signal (Prosel.), the primary control will tell the secondary control to activate the diverter guide in the inlet of the processor and take charge of the ImageMaker com-munication, input sensor, the drive motor speed and the dryer temperature.

The physical connection of the input sensor, the drive motor and the dryer section is on the primary control.



**Processing of Polyester Plates**

High-quality printwork and uniform results are only possible if the processing conditions are absolutely consistent. Scratch-free, uniform processing is essential. You can check whether or not your processor processes uniformly with the aid of an unexposed silver plate.

Process an unexposed silver plate at 20, 25 and 30 sec. Then look for the best compromise of the brightest silver image. The one with the most uniform colour over the printing area usually has the best development. Remember that the first end (up to 60mm) and the last end (up to 30mm) is used for clamping in the press and will not be printed. On some of these parts you can expect scratches due to the transport in the processor (see drawing of plate page 93).

Please follow these guidelines to ensure unproblematic operation with polyester plate. Note the following, when working with Mitsubishi material and chemistry:

**Plate Material**
- Polyester plate should be stored in dry and stable temperature conditions.
- The plate should not be stored more than one year.

**Activator SLM-AC**
- Activator temperature should be between 28-31°C.
- Processing time should be between 20 to 30 sec.
- pH value approximately 13,7. Replace it if less then 12,8.
- Replenishment rate about 150 cc/sqm.

**Stabilizer SLM-ST**
- Stabilizer temperature should be about room temperature.
- Processing time should be between 20 to 30 sec.
- pH value approximately 6,0 – Replace if more than 7,0.
- Replenishment rate about 200 cc/sqm.

**Wash**
- Ensure that the wash section is clean from algae.
- Drain the wash tank and let it stay dry over weekends.
- Do not use chlorine (bleach) for cleaning.

**Dryer**
- The drying temperature should be about 30-40 °C.

**General Use**

The result will change in case of abnormal conditions such as:
- Long time where the chemistry has not been used. If it has not been used, the result can change (it might not be visible). A complete change of the chemistry is advisable every month.
- If there are problems, you may benefit by adding a little old chemistry to the new fresh chemistry (the new can be too active on the first 5-8 sheets).
- High evaporation will cause changes of the final result.
- If the laser intensity is adjusted too low, longer processing time cannot correct the quality of the overall result (density numbers of prints eg.).

- Different batches of polyester plate material may have different emulsion. A calibration of exposure and processing should therefore be performed when changing batch.

If one or more of the conditions are not correct, you can sometimes see problems such as:

- Transport problems: Scratches, white lines on the silver part.
- Reduced print capacity, e.g. only 5000 prints.
- Increased sensitivity: Fingerprints are easily seen on the silver part of the plate (the polyester plates are always sensitive).
- Problems with density.

These are only a few of the parameters that will influence the work with polyester plate.
Echo Graphic only has influence on the developing part. Basically, only the manufacturers of the polyester plate can evaluate the result. When using materials not mentioned here please contact the manufacturer for developing parameters. More information about the entire process with Silver Digiplate can be obtained in the technical guide from Mitsubishi.

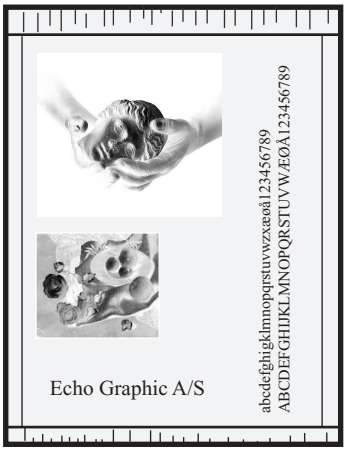
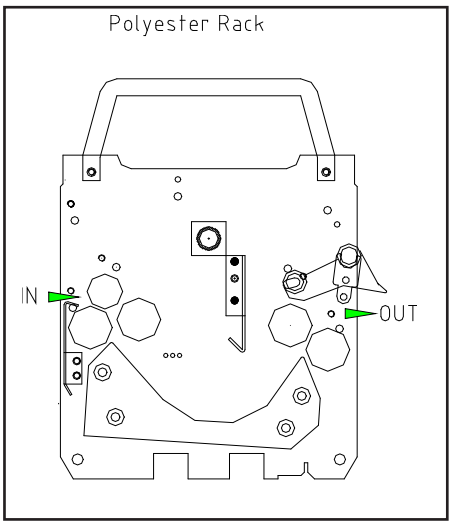



Plate drawing

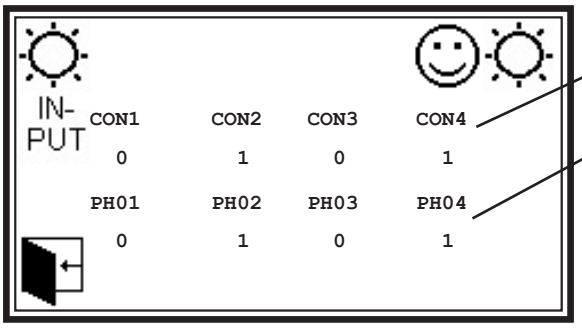
Direction through the processor




Side view of the newest version of polyester racks with blade guides. ImageMakers with a feed where the emulsion is down can be different (like the conventional rack).

**Communication Signals**

To display the signals from the ImageMaker use the information screen. To access from the main menu push S . For more information see section four Operation.




Status conveyor switches. Not used on Purup-Eskofot ImageMakers.

Status signals from ImageMaker.

PH01 - PRLITE - Shifts to night mode
PH02 - PROREQ - Forse processor to start up.
PH03 - PROSEL - Selects material (only combi models 1=Plate)
PH04 - Not used

**Test of Diverter on Purup-Eskofot Combi**

1. Enter the service menu.
2. Select output.
3. Press the right arrow ( Fig 1)
   - Activate 1. DC MOTOR 1 (Fig 2)
3. Move one level back
   - Use M1. DC REV. 2 to control the diveter. (Fig1)

Please note that when it is in state OFF
28 V DC can be mesured between pin 1 -2 and 1-3 on the diveter.
When it is in state ON 28 V DC can be measured on pin 1-2 and 2-3 on the diveter

The diveter cable is connected to the secondary main board.

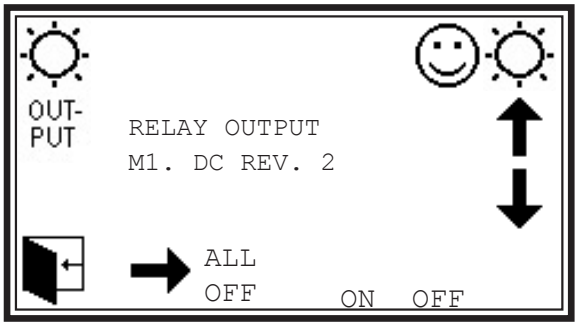



Fig 1

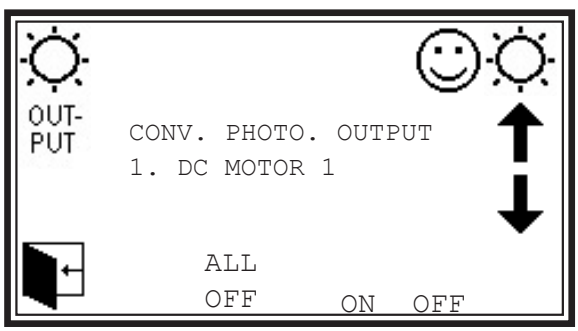
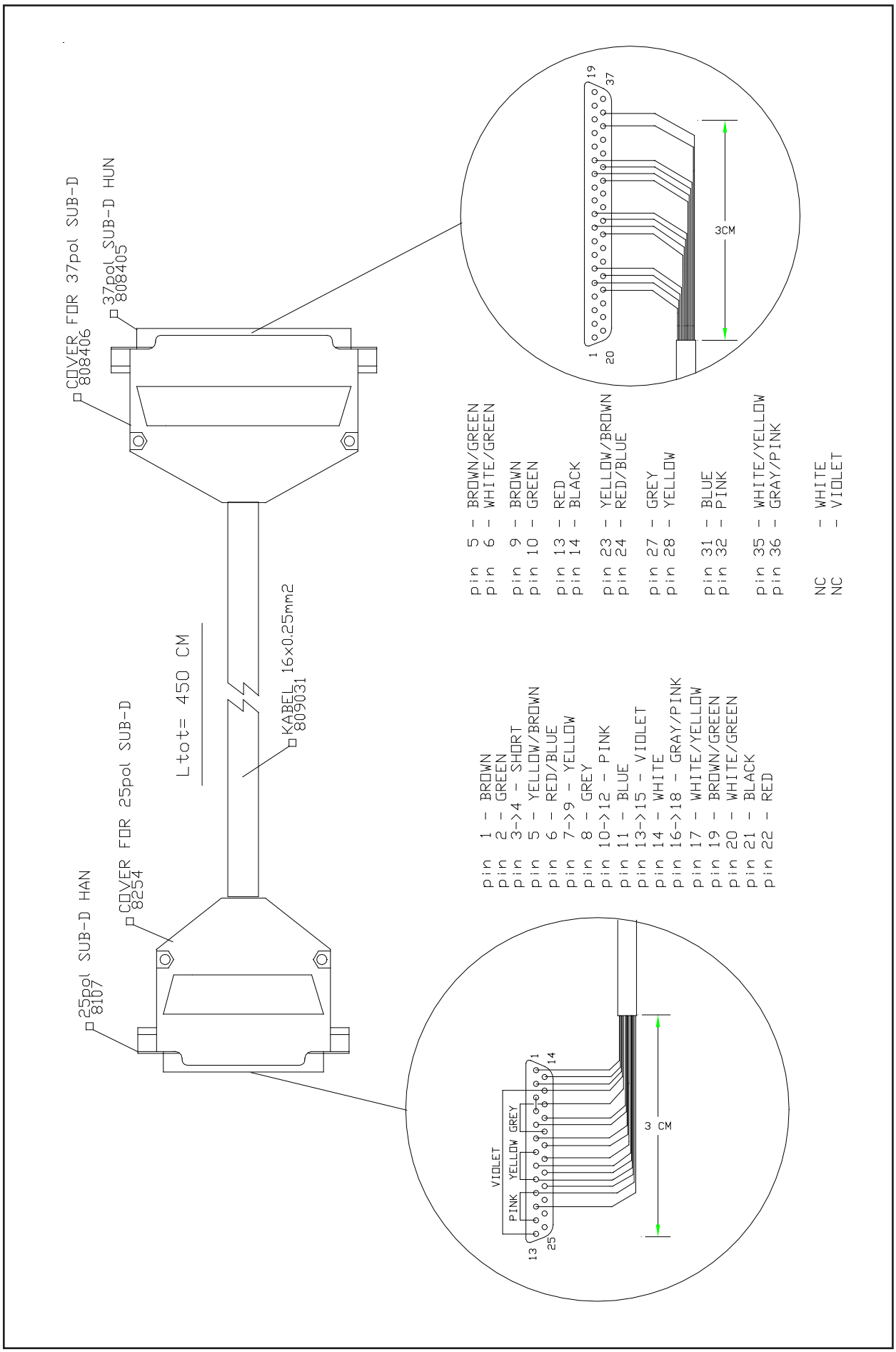
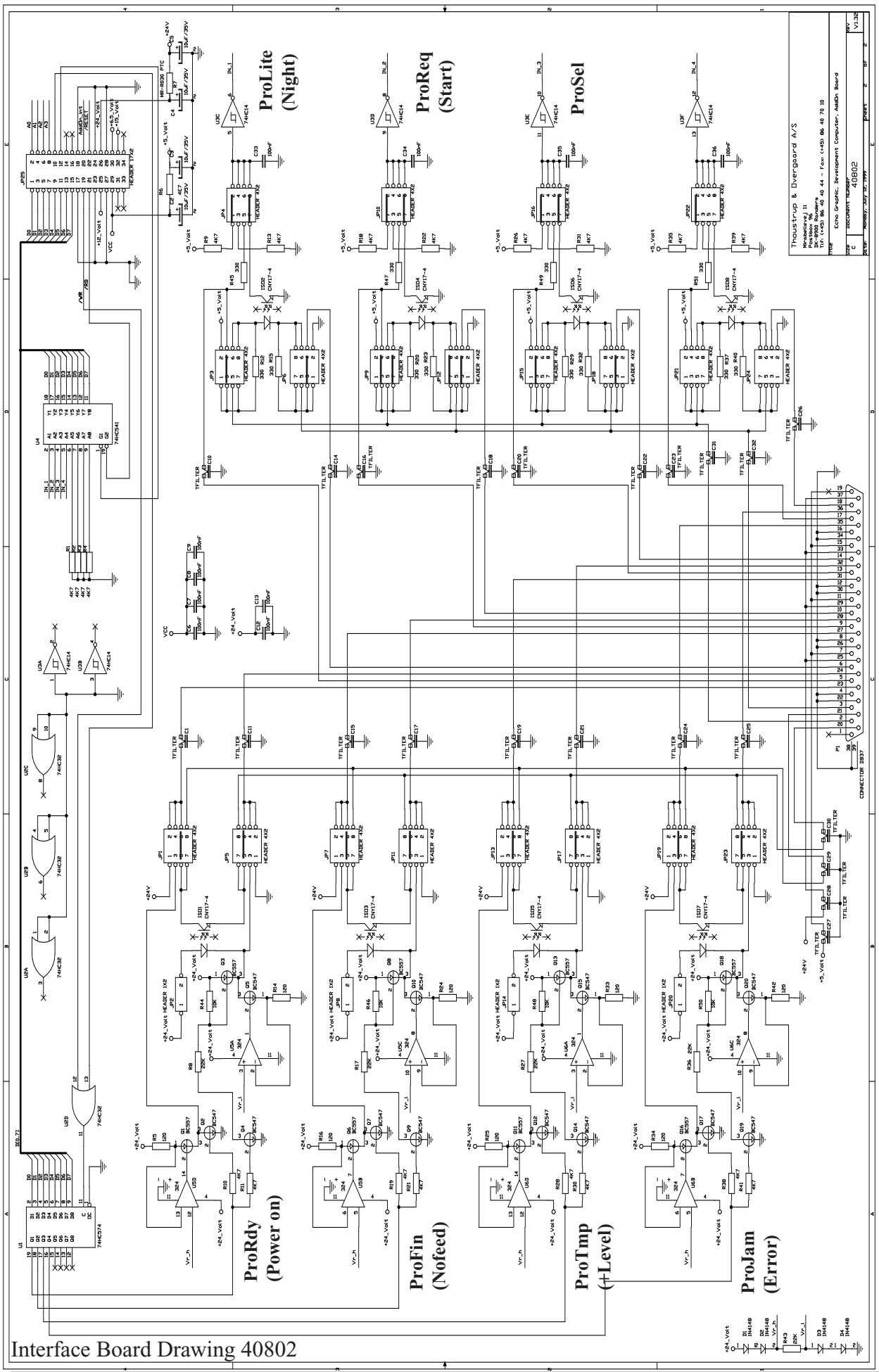



Fig 2

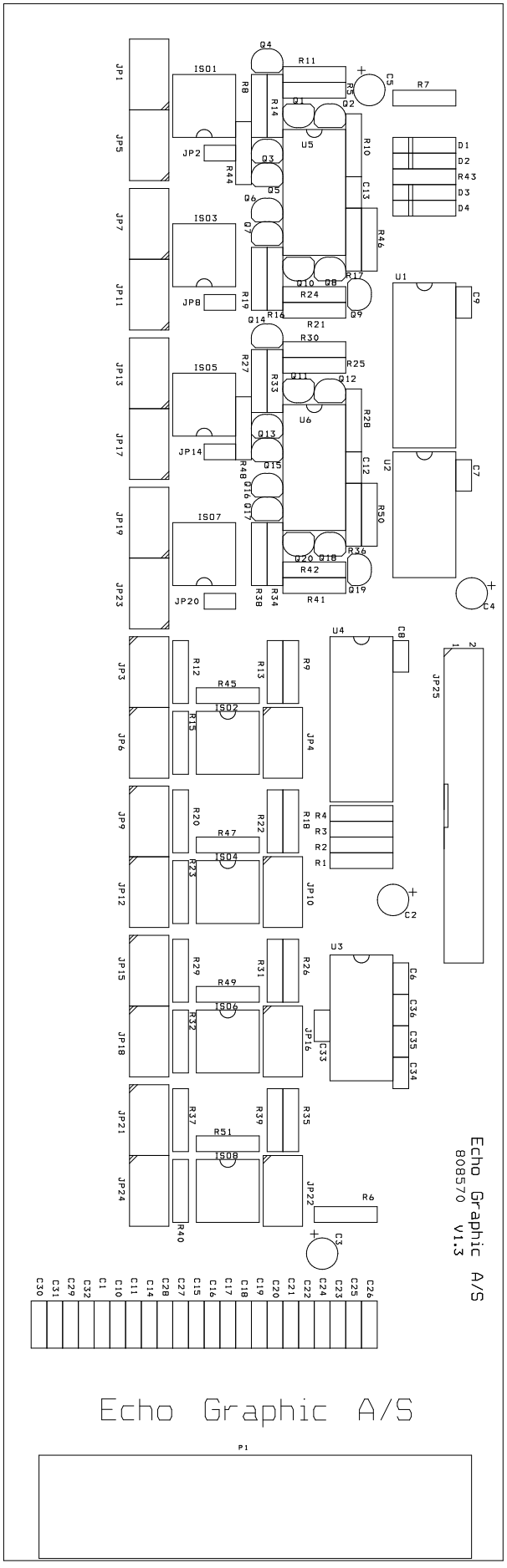
SECTION 8




Connection Cable Purup - Processor, Drawing 305419



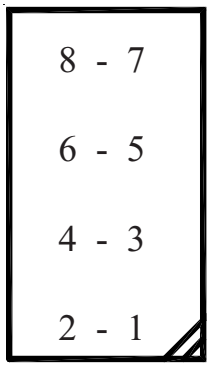

Interface Board Drawing 40802

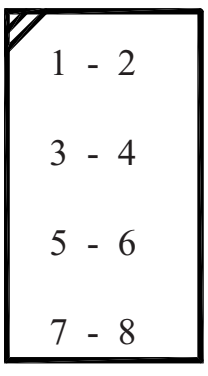



## 8.4 Drawings and Jumper Settings

**Jumper Settings with Purup-Eskofot Imagesetter B1/B2**

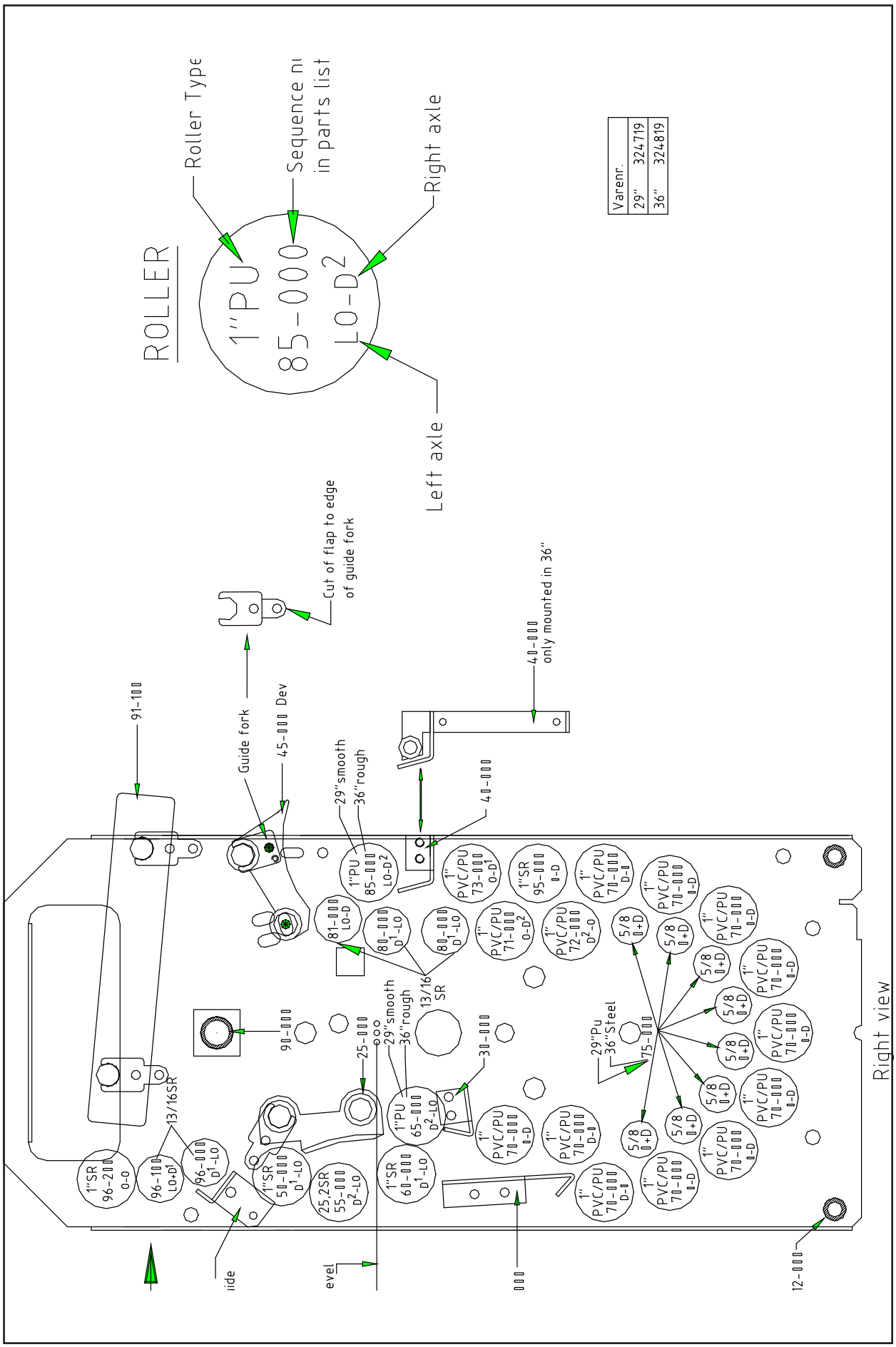
| JP | 1-2 | 3-4 | 5-6 | 7-8 |
|---|---|---|---|---|
| 1 | | | X | |
| 2 | X | | | |
| 3 | | X | | |
| 4 | X | | | X |
| 5 | | | X | |
| 6 | | X | | |
| 7 | | | X | |
| 8 | X | | | |
| 9 | | X | | X |
| 10 | X | | | X |
| 11 | | | X | |
| 12 | | X | | X |
| 13 | | | X | |
| 14 | X | | | |
| 15 | | X | | |
| 16 | X | | | X |
| 17 | | | X | |
| 18 | | X | | |
| 19 | | | X | |
| 20 | X | | | |
| 21 | | | | |
| 22 | | X | | |
| 23 | | | X | |
| 24 | | | | |



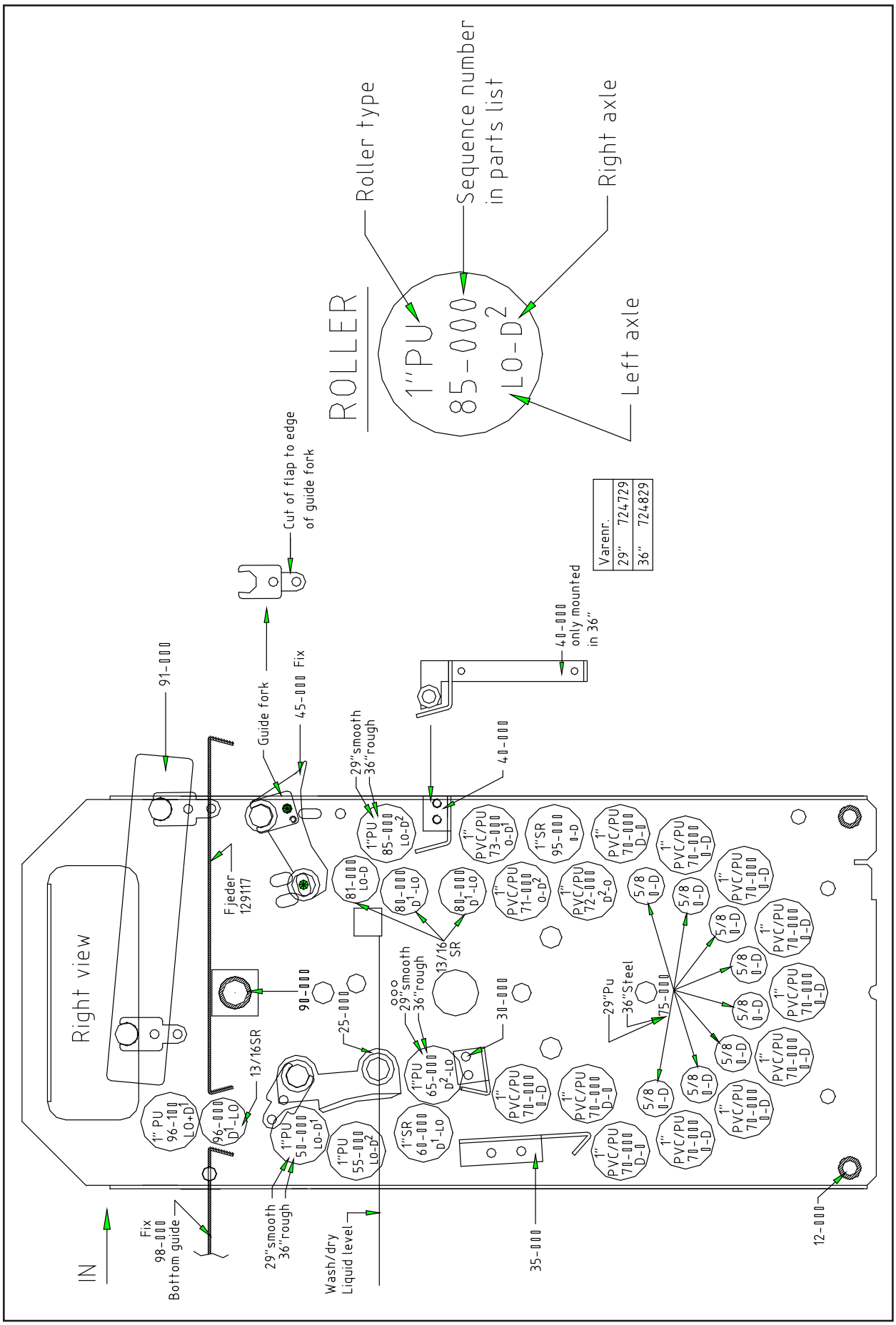




Pin one is in the corner!

Interface Board Location, Drawing 40802

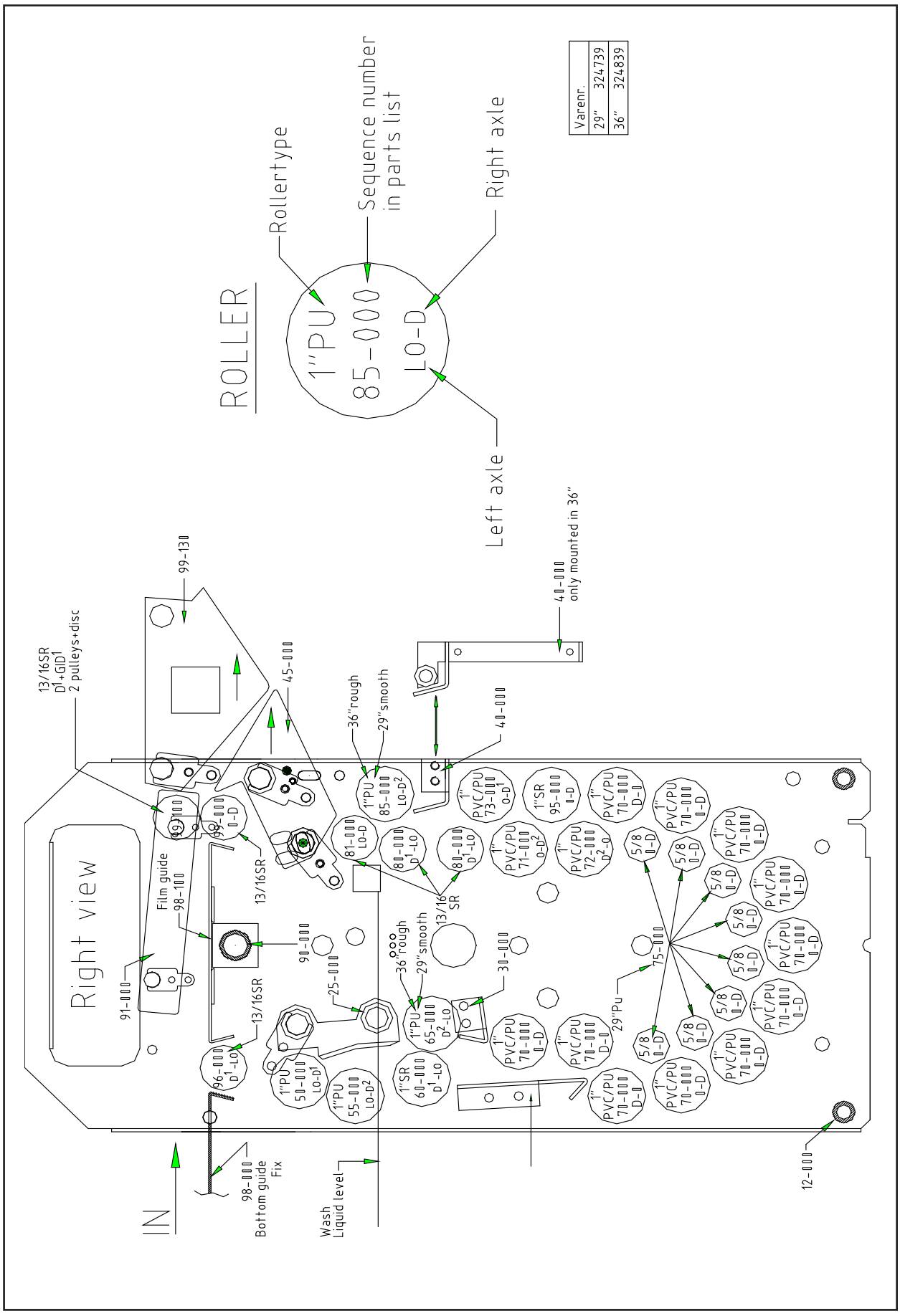



Dev1 Rack 36" R44 Combi, Drawing 324719

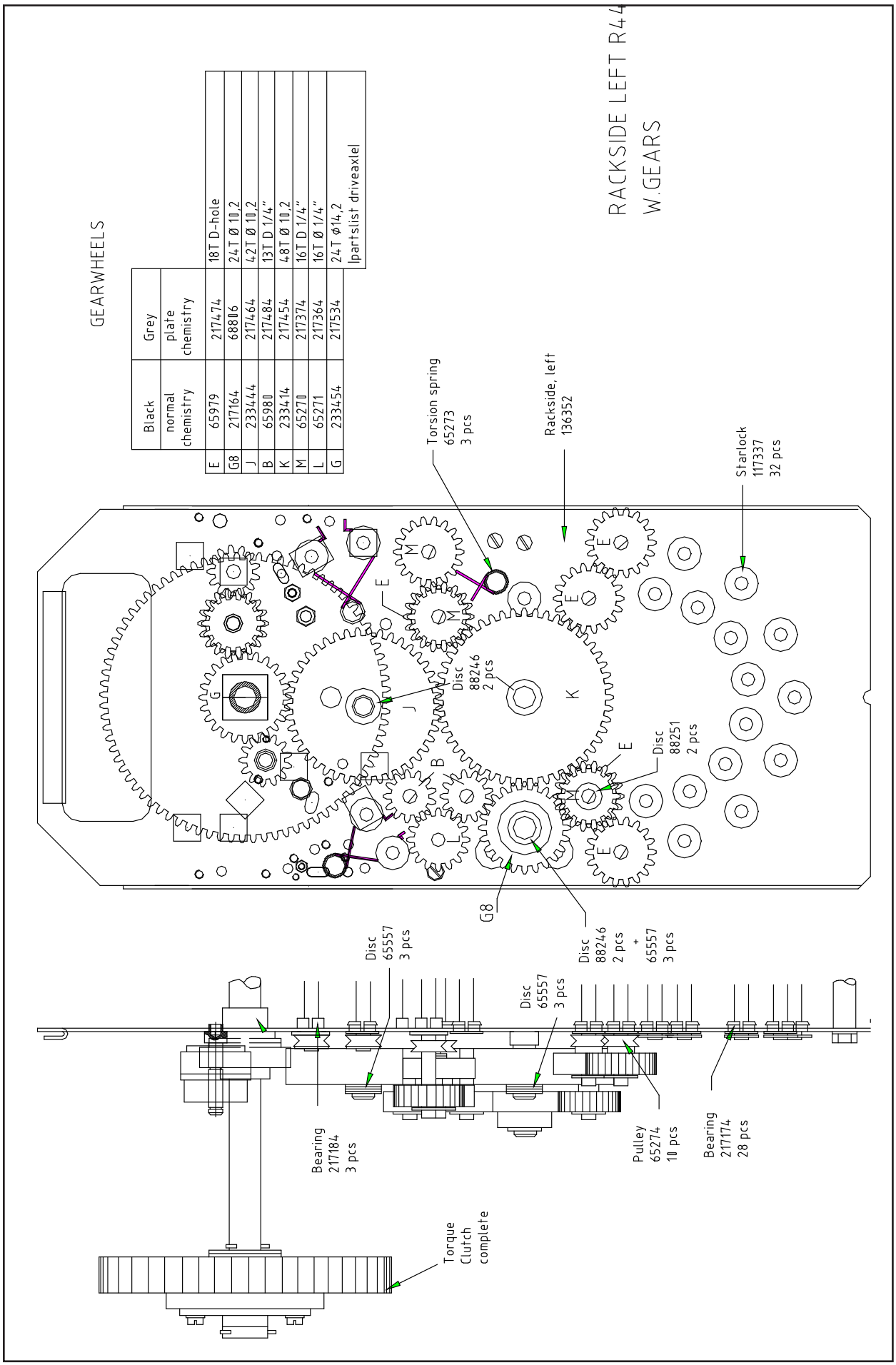



Fix1 Rack 36" R44 Combi, Drawing 324729

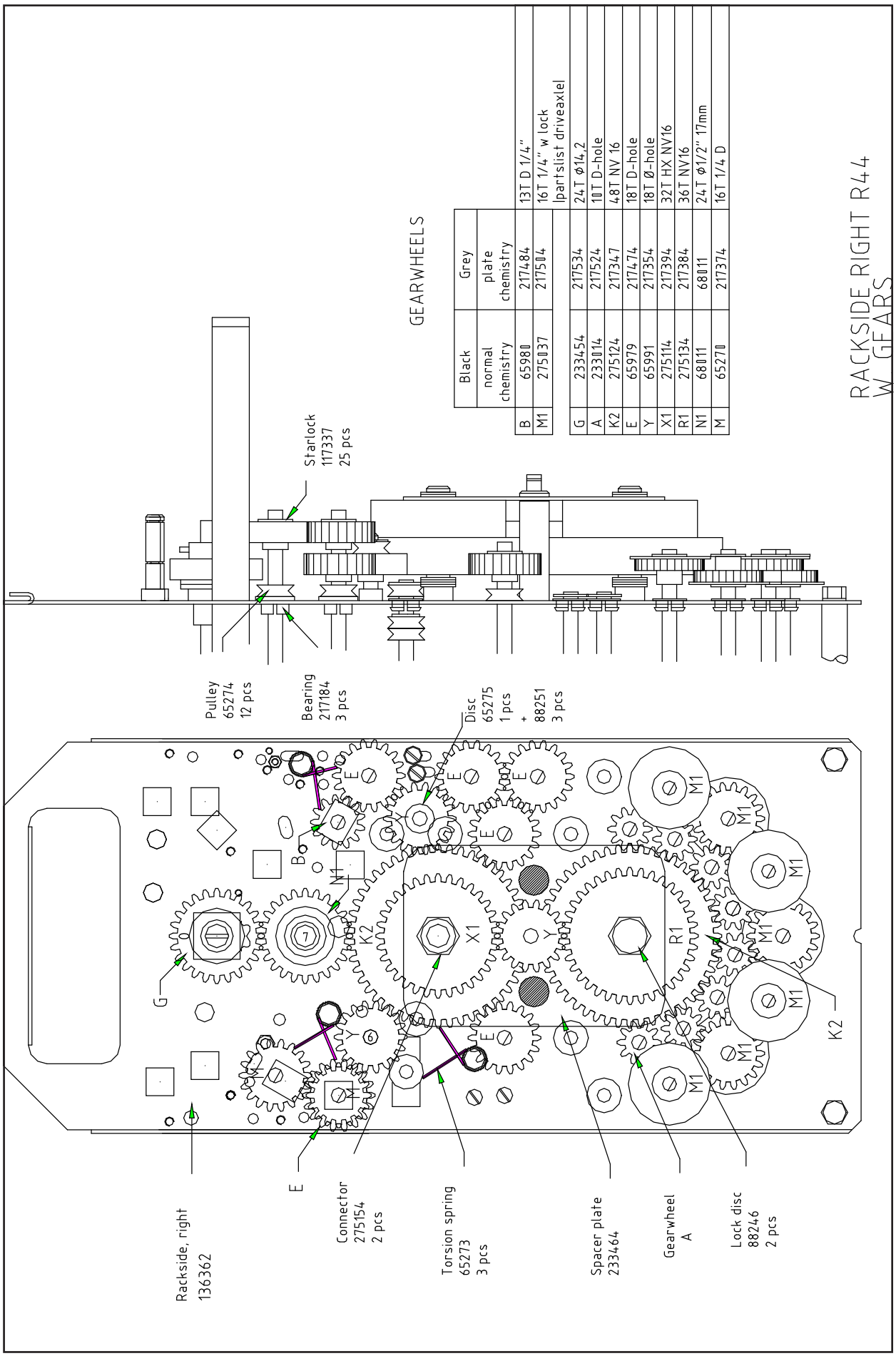
SECTION 8




Wash1 Rack 36" R44 Combi, Drawing 324739

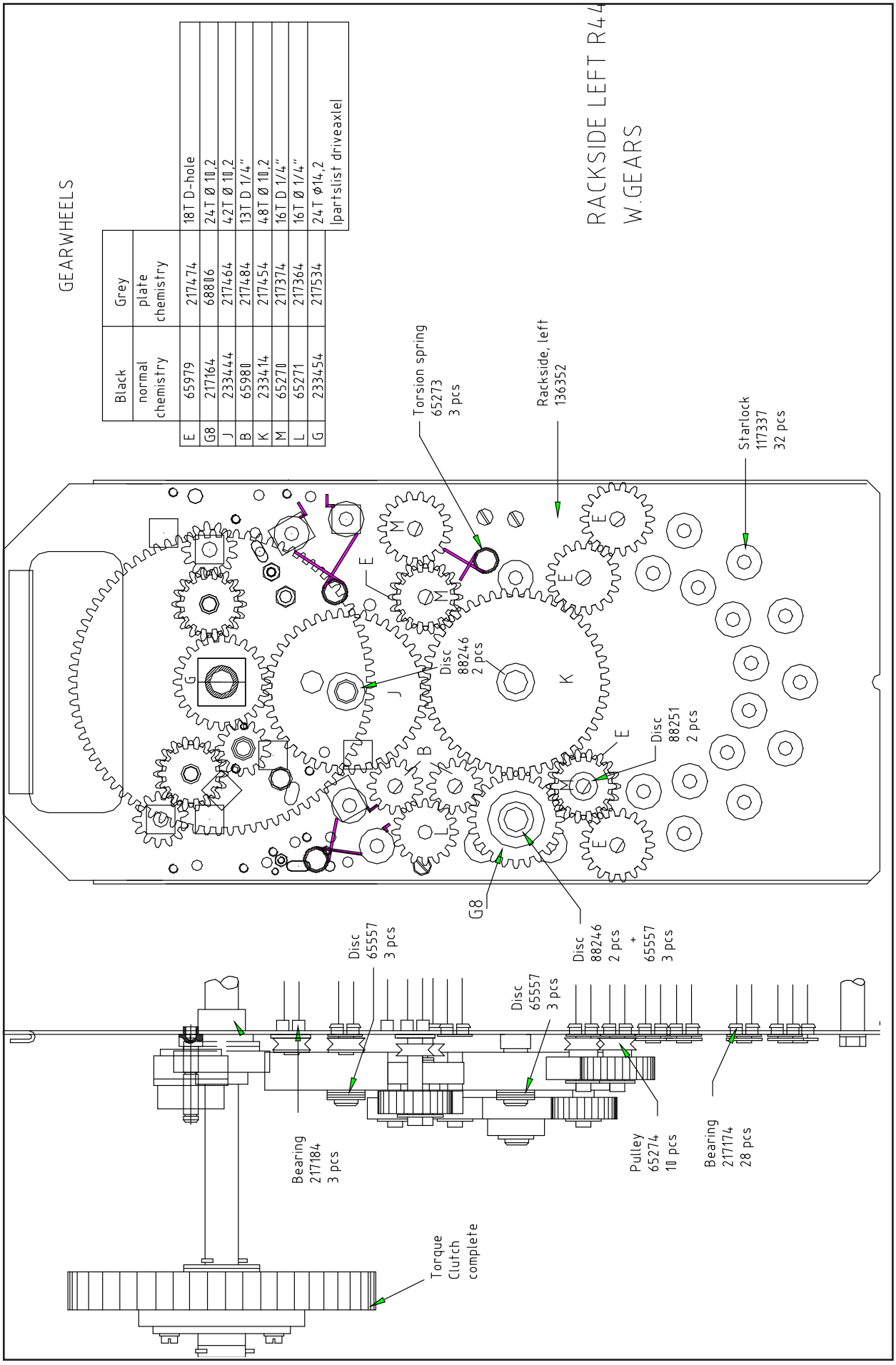



Rack Side l.w. Gears Dev. / Fix. R44 Combi, Drawing 5788

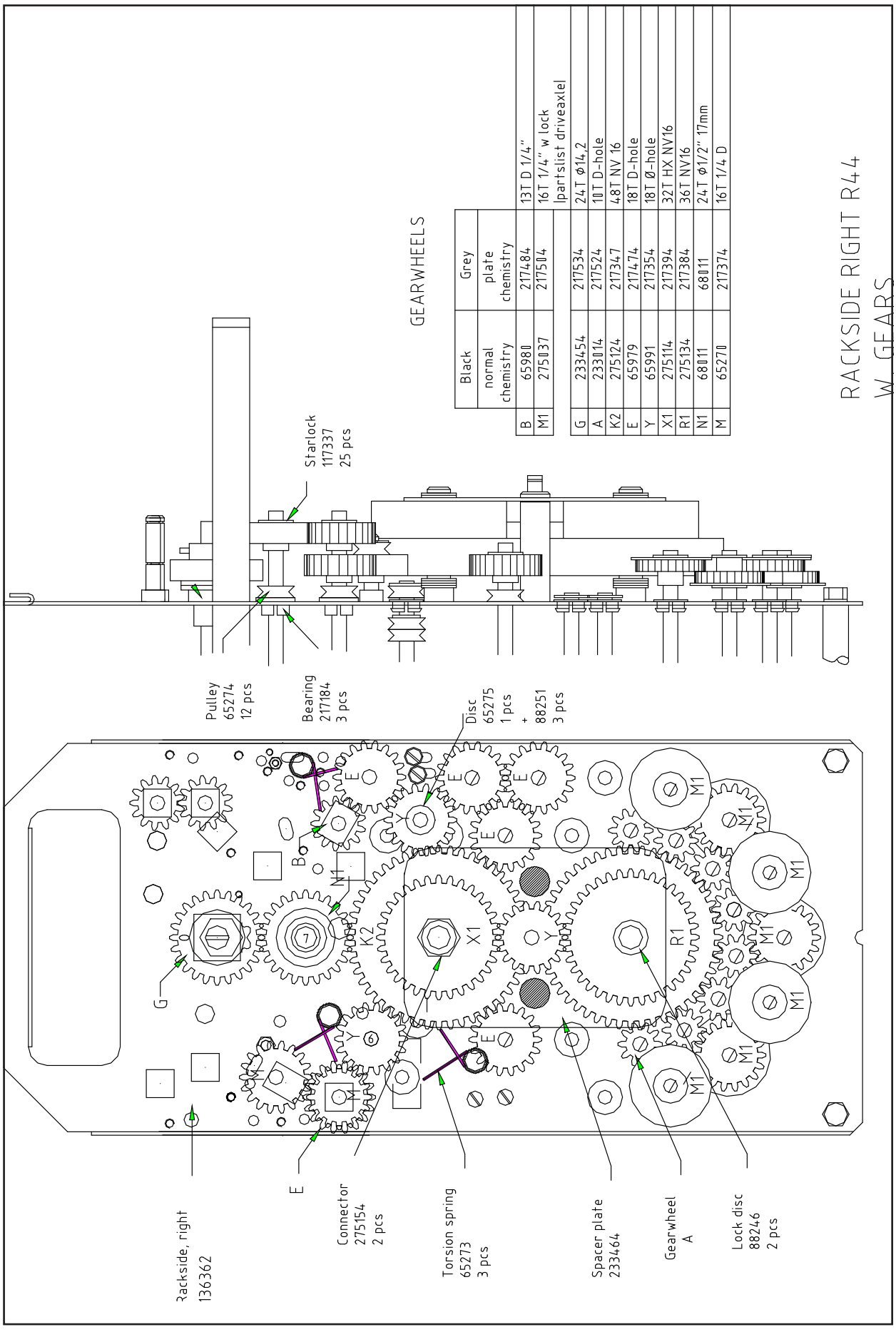



| | Black normal chemistry | Grey plate chemistry | |
|---|---|---|---|
| B | 65988 | 217484 | 13T D 1/4" |
| M1 | 275037 | 217504 | 16T 1/4" w lock (partslist driveaxle) |
| G | 233454 | 217534 | 24T ø14,2 |
| A | 233014 | 217524 | 10T D-hole |
| K2 | 275124 | 217347 | 48T NV 16 |
| E | 65979 | 217474 | 18T D-hole |
| Y | 65991 | 217354 | 18T ø-hole |
| X1 | 275114 | 217394 | 32T HX NV16 |
| R1 | 275134 | 217384 | 36T NV16 |
| N1 | 68011 | 68011 | 24T ø1/2" 17mm |
| M | 65270 | 217374 | 16T 1/4 D |

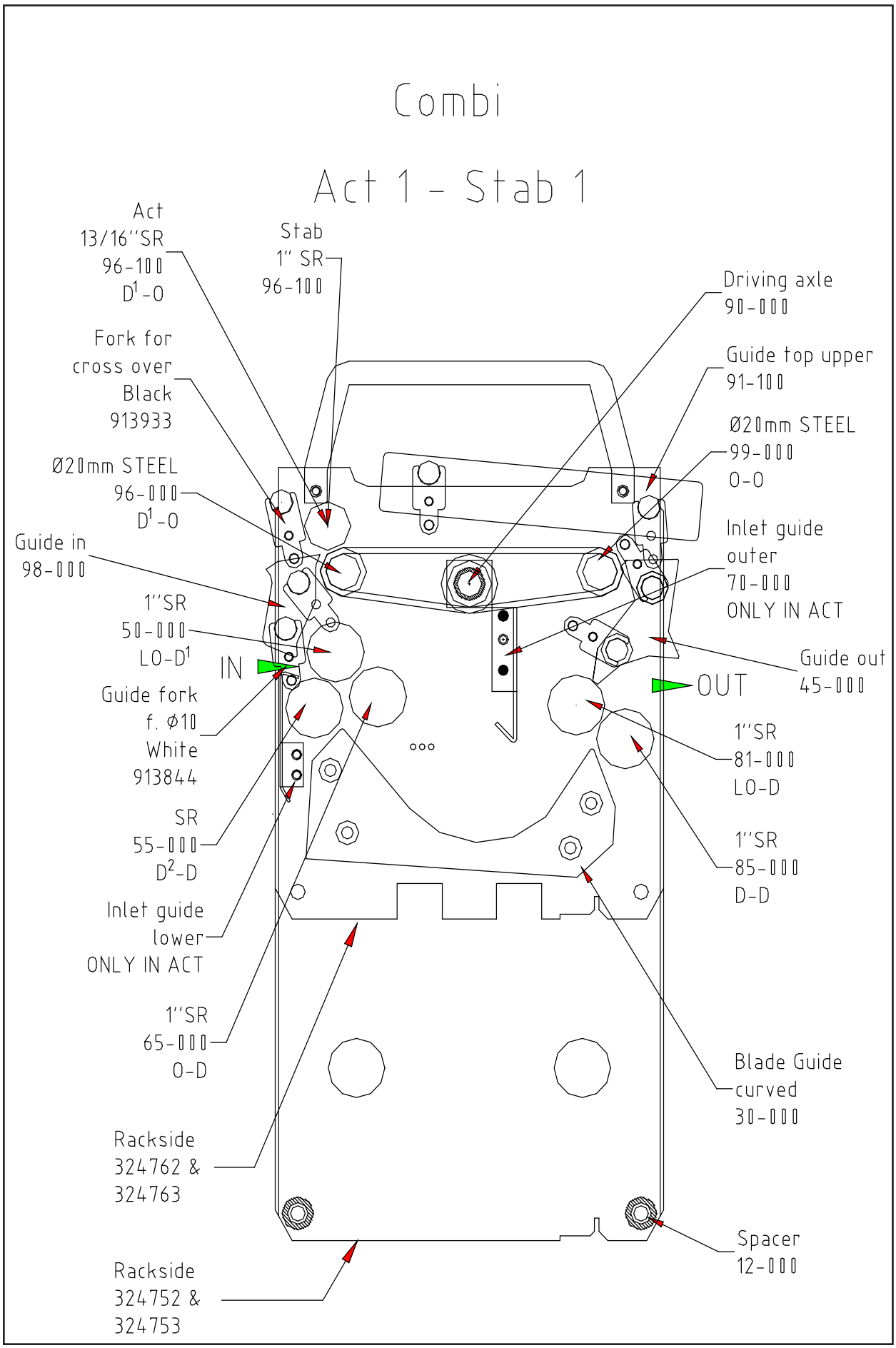
Rack Side r.w. Gears Dev. / Fix. R44 Combi, Drawing 5792




Rack Side l.w. Gears Wash R44 Combi, Drawing 5789

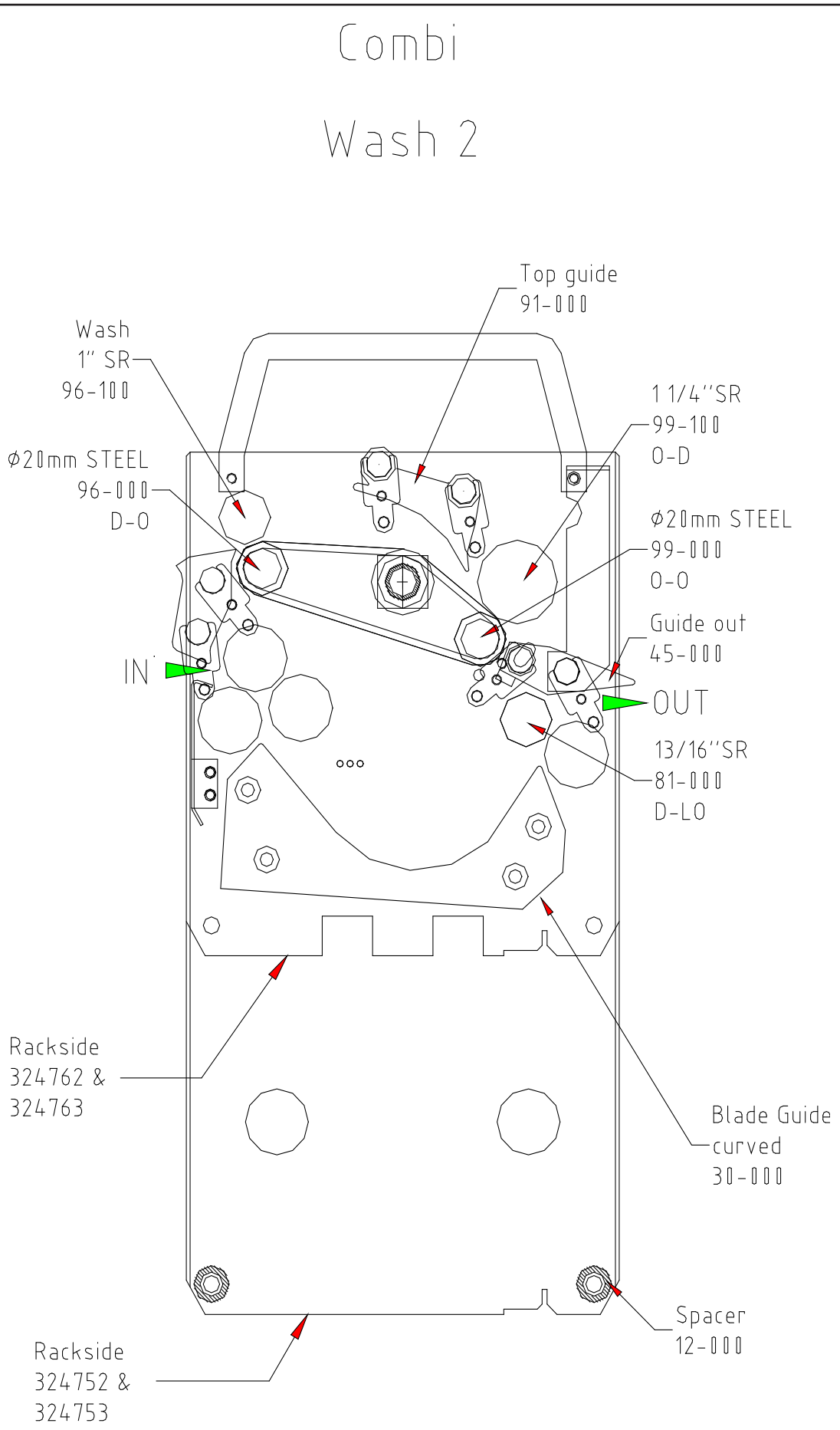



Rack Side r.w. Gears Wash R44 Combi, Drawing 5793

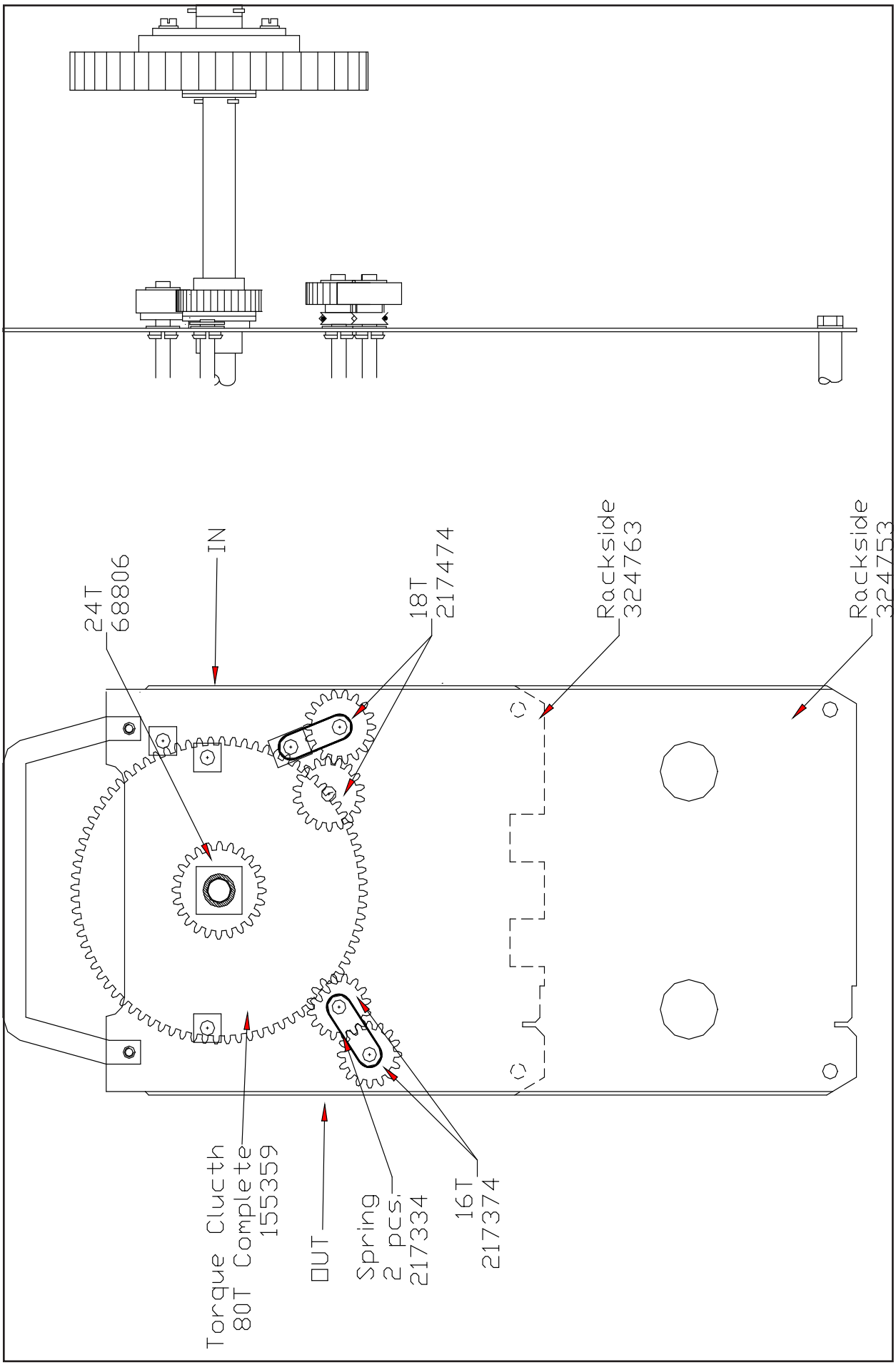



Fix. Rack / Act. Rack 36" R20 Combi E/\C\/sh, Drawing 5975a

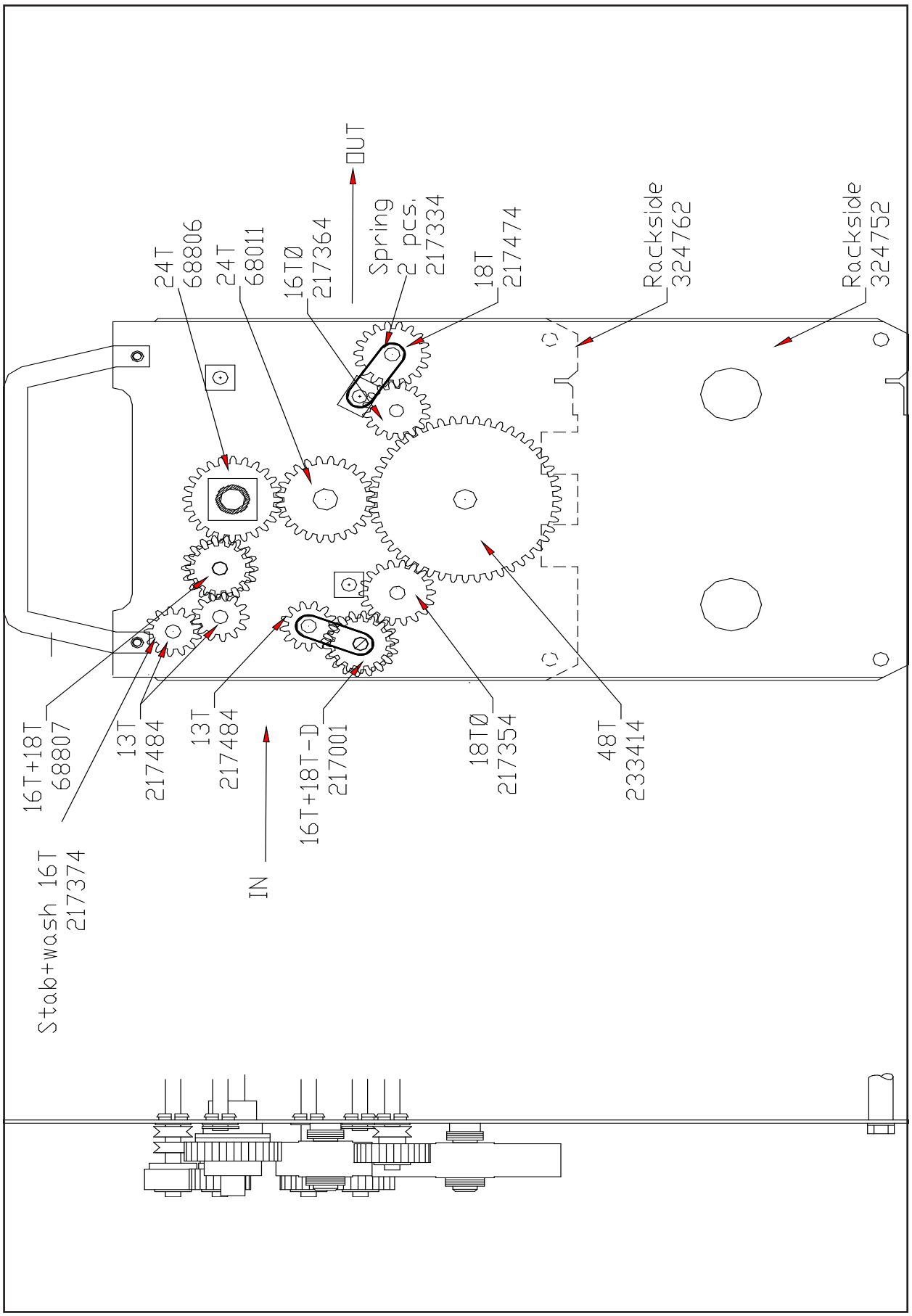
SECTION 8



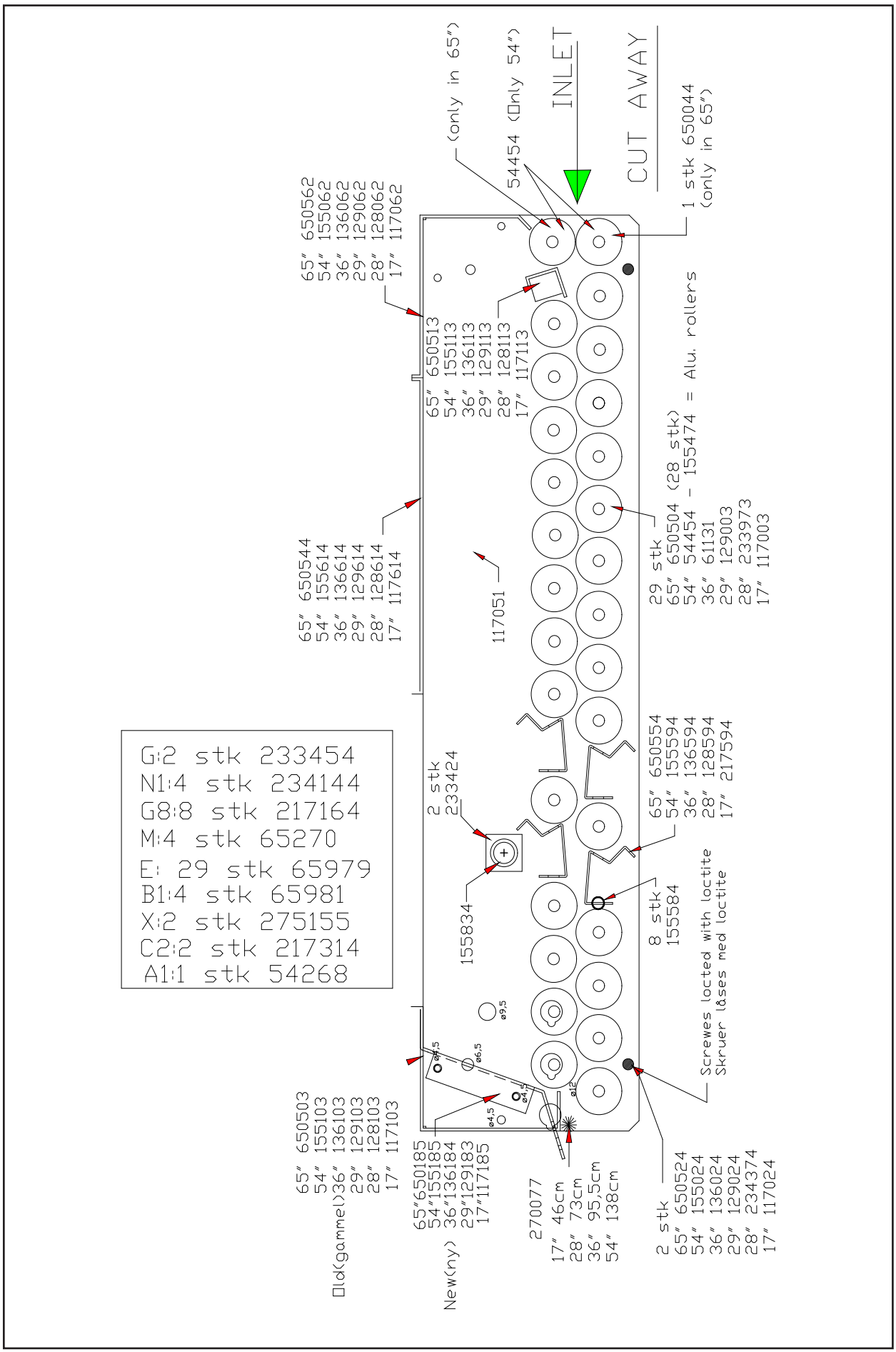

Wash2 Rack 36" R20 Combi EΛCV/sh, Drawing 5975b



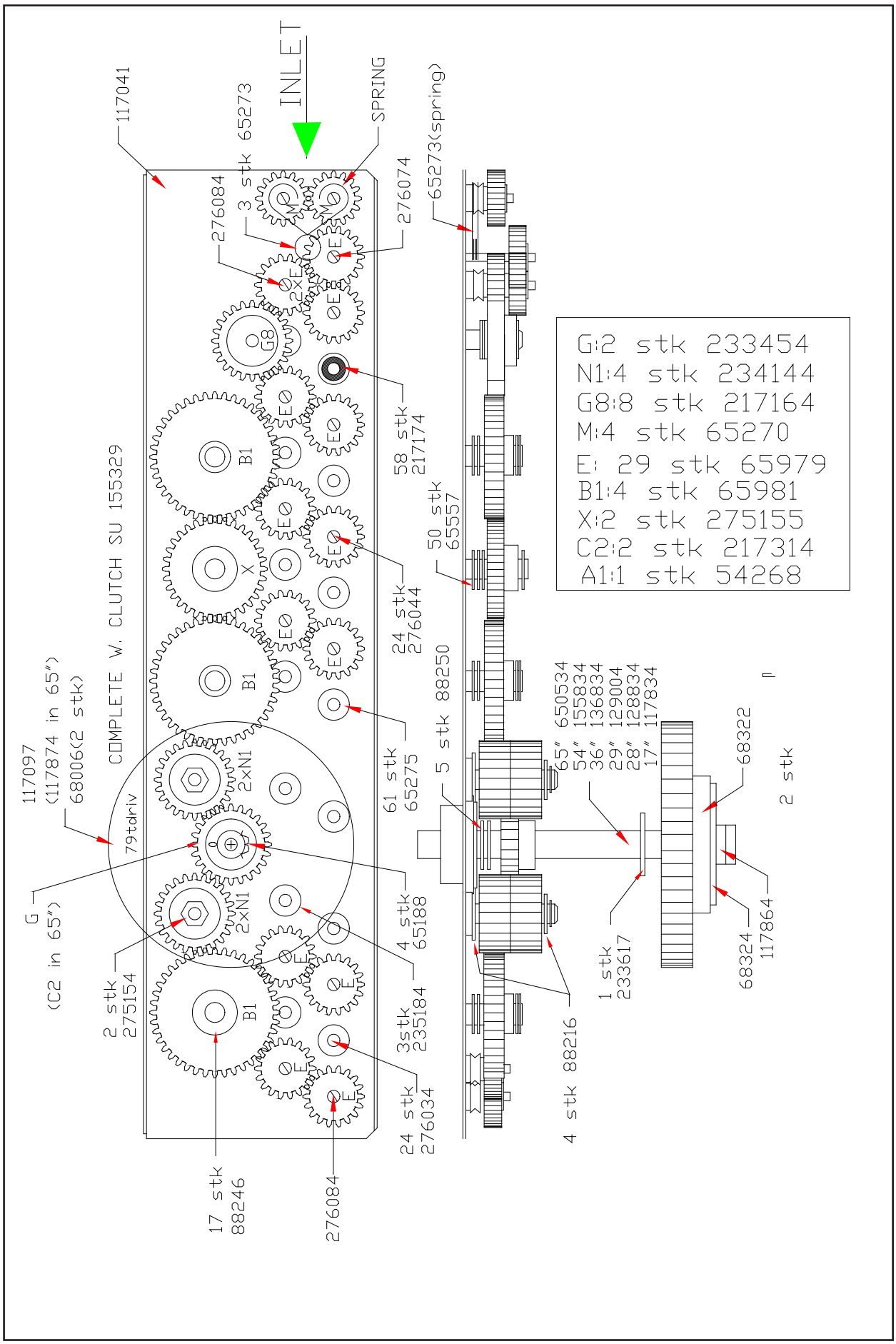

Rack Side l.w. Gears R20, Drawing 324815



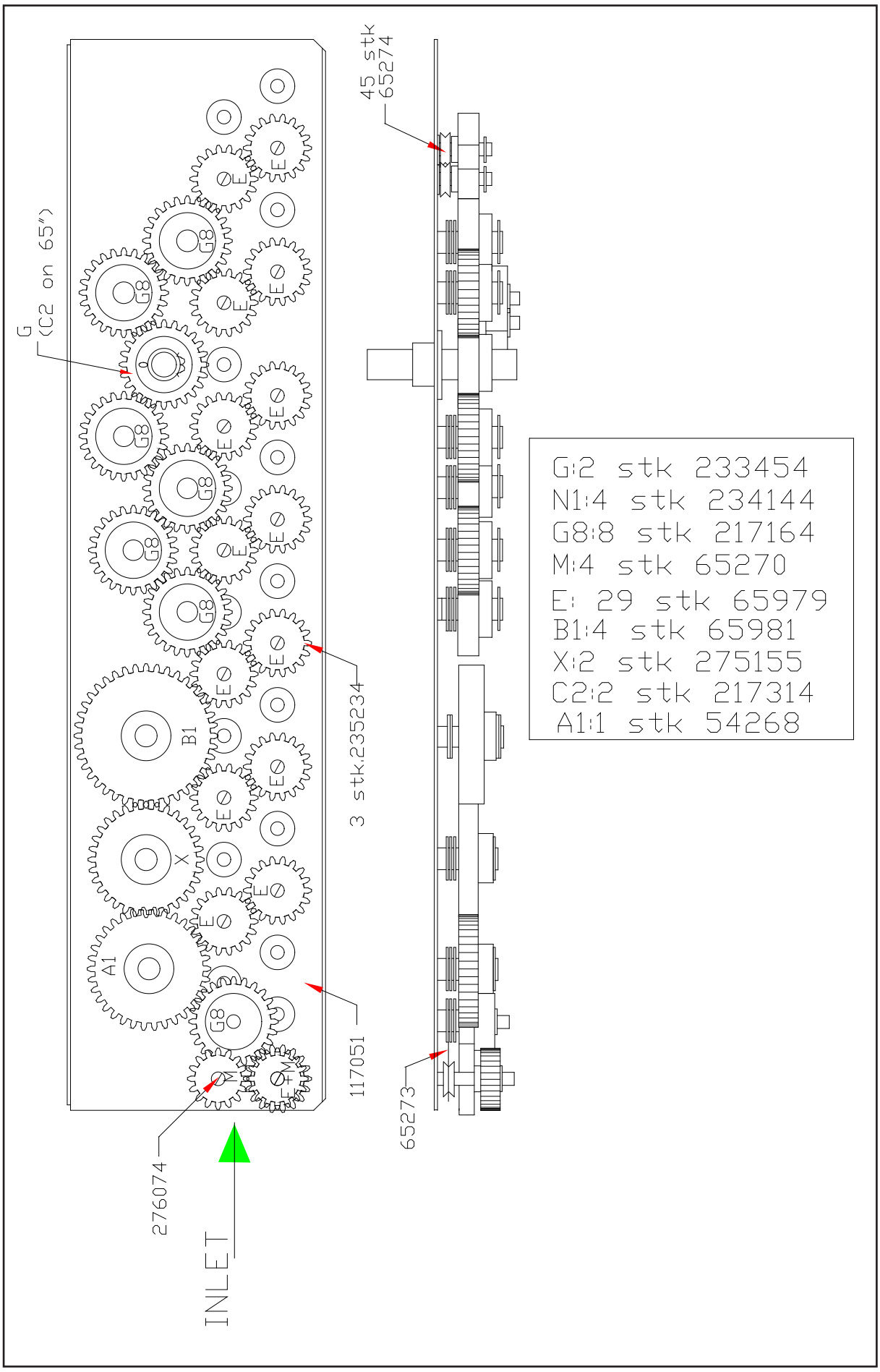

Rack Side r.w. Gears R20, Drawing 324825



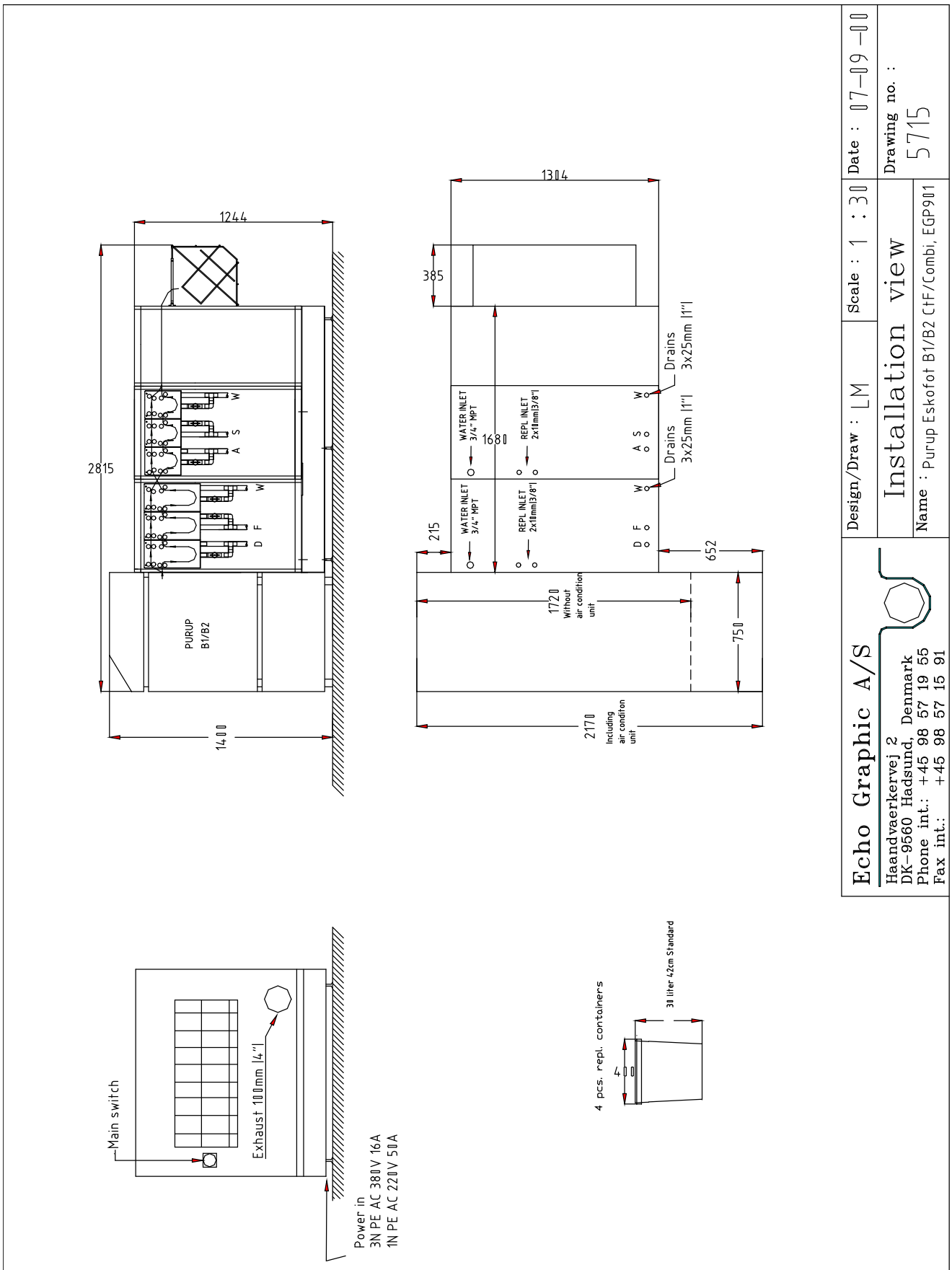

R33 Horizontal Dryer Roller Position, Drawing 5930




R33 Horizontal Dryer Gearwheel Position Left Side, Drawing 5930




R33 Horizontal Dryer Gearwheel Position Right Side, Drawing 5930




Installationview 5715

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## Hope/Carnfeldt On-Line Processors for Purup-Eskofot ImageMakers:

| | EG 900 | EP 900 | EG 901 | EGP 901 |
|---|---|---|---|---|
| **Dimensions of on-line system** | | | | |
| Length | 222 cm / 87.4” | 222 cm / 87.4” | 222 cm / 87.4” | 281 cm / 110.7” |
| Width | 217 cm / 85.4” | 217 cm / 85.4” | 217 cm / 85.4” | 217 cm / 85.4” |
| Height | 140 cm / 55.1” | 140 cm /55.1” | 140 cm / 55.1” | 140 cm / 55.1” |
| **Shipping dimensions** | | | | |
| Length | 133 cm / 52.4” | 133 cm / 52.4” | 133 cm / 52.4” | 175 cm / 68.9” |
| Width | 142 cm / 55.9” | 142 cm / 55.9” | 142 cm / 55.9” | 142 cm / 55.9” |
| Height | 143 cm / 56.3” | 143 cm / 56.3” | 143 cm / 56.3” | 129 cm / 56.3” |
| **Weight** | | | | |
| Net | 350 kg/772 lb. | 350 kg/772 lb. | 350 kg/772 lb. | 520 cm/1146 lb |
| Gross | 435 kg/960 lb. | 435 kg/960 lb. | 435 kg/960 lb. | 625 cm/1378 lb |
| **Specifications** | | | | |
| Inlet width | 91 cm / 36” | 91 cm / 36” | 91 cm / 36” | 91 cm / 36” |
| Tank capacity | 29 l / 7.7 US gal. | 16 l / 4.3 US gal. | 29 l / 7.7 US gal. | 29 l/7.7 US gal. |
| Rack length dev. | 32 cm / 12.6” | 20 cm / 7.9” | 44 cm / 17.3” | 44 cm / 17.3” |
| Developing time min.-max. | 20-80 sec. | 15-90 sec | 15-90 sec. | 15-120 sec. |
| Speed at 30 sec. dev. time | 64 cm/min.<br>25.2”/min | | 88 cm/min.<br>34.6”/min. | 88 cm/min.<br>34.6”/min. |
| Speed at 20 sec. dev. time | | 60 cm/min.<br>23.6”/min. | | 60 cm/min.<br>23.6”/min. |
| Max. film length off-line | 10 m / 32.8 ft | 2 m / 6.6 ft. | 10 m /32.8 ft | 10 m / 32.8 ft. |
| Min. film size off-line | 30x42 cm<br>11.8 x 16.5” | 30x42 cm<br>11.8 x 16.5” | 18 x 10 cm<br>7 x 4” | A4 |
| Max. format (set by ImageMaker) | 76x86 cm<br>29.9 x 33.9” | 76x86 cm<br>29.9 x 33.9” | 86 x 121 cm<br>34 x 47.6” | 21 x 29 cm<br>8.3” x 11.4” |
| Dev./fix./wash temperature range | 20-45°C<br>68 - 113°F | 20-45°C<br>68 - 113°F | 20-45°C<br>68 - 113°F | 20-45°C<br>68 - 113°F |
| Exhaust blower | Built in | Built in | Built in | Built in |
| Exhaust connection | Ø 10 cm | Ø 10 cm | Ø 10 cm | Ø 10 cm |
| Circulation rate dev., fix. | 10 l/min.<br>2.7 US gal. | 10 l/min.<br>2.7 US gal. | 22 l/min.<br>5.8 US gal. | 22 l/min.<br>5.8 US gal. |
| Water consumption (operate) | 3.5 l/min.<br>0.9 US gal | 3.5 l/min.<br>0.9 US gal | 3.5 l/min.<br>0.9 US gal | 3.5 l/min.<br>0.9 US gal |
| Emission of heat to room (operate) | 3000W<br>879 BTU/hr. | 3000W<br>879 BTU/hr. | 3000 W<br>879 BTU/hr. | 3000 W<br>879 BTU/hr. |
| Water connection | ¾” MPT | ¾” MPT | ¾” MPT | ¾” MPT |
| Drain connection | 3x1” hose nipple | 3x1” hose nipple | 3 x 1" hose nipple | 6x1” |
| Replenishment containers | Dev/fix 30l. | Dev/fix 30l | 4 x 30 l | 4 x 30 l |
| Max. power consumption | 5900VA | 5900VA | 7900 VA | 9400 W |
| Average power consumption: | | | | |
| Operate | 5000W | 5000W | 5700 W | 6200W |
| Power save | 1000W | 1000W | 3500 W | 3500 W |
| Night mode | 600 W | 600 W | 1100 W | 1100 W |
| Power supply: | | | | |
| 1x230ACV+/-10% / 50/60Hz | 30 amp | 30 amp | 40 amp | 40 amp |
| 3x230ACV+/-10% / 50/60Hz | 3 x 16 amp | 3x16 amp | 3 x 16 amp | 3x16 amp |

Techinical Specifications ImageMaker B1-B2