# Prisma Di





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# **OVALITY KIT**

The Ovality Kit is an accessory to the DI-5C Deflection Indicator and is designed primarily to measure cylinder liner wear and ovality, diameters 180–600 mm.

However, the device can be modified to take measurements from various applications to your own requirements.

#### Note!

- The total measuring range is:
  + 2,015 mm to 2,015 mm
- The figure illustrates the complete kit and method of assembly:
- Tighten all screw joints FIRMLY -

#### 1.

Mount the measuring adapter K to the transducer B and secure with set screw (use 2 mm hexagon).

Item (K1) for cylinder liners from 180-270 mm. Item (K2) for cylinder liners from 270-380 mm. Item (K3) for cylinder liners from 380-600 mm. Check that the measuring ball rod is moving freely, apply a drop of oil if necessary.

#### 2.

Join appropriate lengths of extension bars c between the transducer (B) and the hole of the Ball Tip M at the opposite end to match the correct diameter size.

#### 3.

Attach the vertical extension arms L to each end M and K.

# 4.

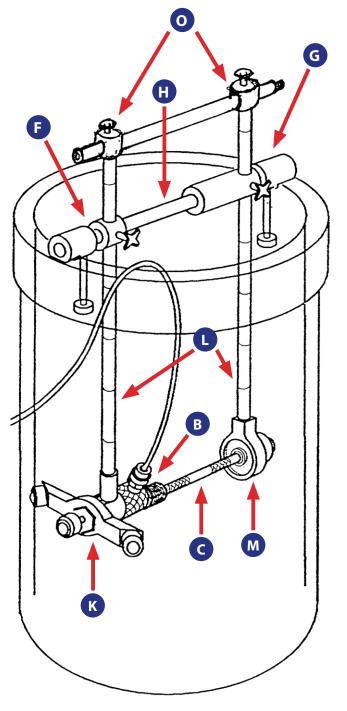
Connect both adapter blocks **F** and **G** to the required horizontal extension arms **H** to suit the liner top diameter.

### Note!

The transducer **B** shall be located below, and on the same side as adapter block **F** which has the longer adjustment.

# 5.

Add vertical extension arms as required through the holes in and to achieve required depth in the cylinder liner.





#### 6.

End stoppers o are fitted from the factory to the upper end of the vertical extension arms. This will prevent either extension arm accidently slipping through the hole.

#### **7.**

Insert the assembled device into the liner. Adjust the outer parts of the adapter blocks **F** and **G** and arm **H** to enable tracking around the liner top whilst the small side thrust rollers are in contact with the internal diameter of the liner. Tighten all three locking screws.

#### 8.

Adjust the vertical arms to the same height and firmly lock the locking screws. We recommend to start measurement from the bottom of the liner, where the cylinder diameter normally is very close to the original.

Extension arms H will be used to rotate the apparatus when fully assembled.

#### 9.

Start the DI-5C by depress the OK button. For display light, press  $\Lambda$  for 3 seconds.

#### 10.

Enter figures according to Prisma DI-5C manual all the way down until you reach RESET on instrument display.

#### 11.

Turn the adjusting screw at the transducer until a reading somewhere close to (minus) –1,000 to -2,000 mm. Enables a positive measuring range of over 3,000 to 4,000 mm.

# **12.**

Accept ZERO set by pushing OK.

# **13.**

Rotate the shaft to the measuring positions and accept by pushing OK at each position.

# 14.

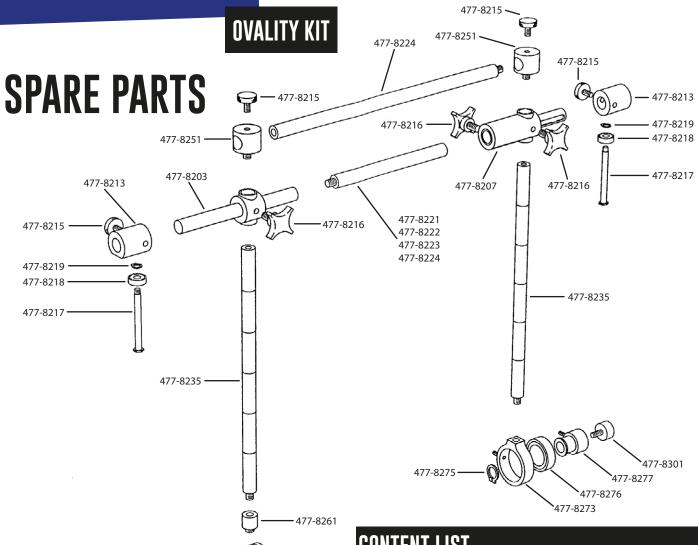
When the measuring points in the bottom have been stored, move the vertical bars to next measuring level.

# Note!

To get both wear and ovality in the cylinder **do not reset to zero** between measuring levels in the liner.

When all positions at the different levels are stored, switch off the instrument by holding OK for 3 seconds, or connect to your PC and transfer the measuring data to the PC program, according to DI-5C PC manual.

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477-8312	477-8268
477-8271	477-8264 477-8263
000	477-8252 477-8257
/ 477-8260 477-8301 477-8262 Wartsila 477-83:	477-8259

<u> </u>	V	I FI91			
ITEM CODE PC	S	DESCRIPTION	ITEM CODE	PCS	DESCRIPTION
	_	Balls for center wing	477-8216	3	Ovality Kit Locking screw, four tags
477-8203	1	Ovality Kit Arm holder left	477-8215	4	Ovality Kit Locking
477-8207	1	Ovality Kit Arm holder,			screw, round head
		right side	477-8277	1	Ovality Kit Measuring ball holder, Right Hand
477-8273	1	Ovality Kit Ball bearing House, Right Hand	477-8301	2	Ovality Kit Measuring
477-8276	1	Ovality Kit Ball bearing,			ball
477.0040	_	large, Right Hand	477-8260	1	Ovality Kit Measuring Shaft
477-8218	2	Ovality Kit Ball bearings, small, Right/Left Hand	477-8262	1	Ovality Kit Measuring
477-8252	1	Ovality Kit Center wing,			shaft, Wartsila
		length 100 mm	477-8275	1	Ovality Kit Safety
477-8257	1	Ovality Kit Center wing, length 150 mm	477-8219	2	ring, Ø 20 mm Ovality Kit Safety ring,
177-8259 1	1		177 0217		Ø7 mm
		length 200 mm	477-8217		Ovality Kit Shaft for
	1				ball bearings, Right/Left Hand
477-8251	2	Ovality Kit End stopper, horizontal arms	477-8261	1	Ovality Kit Shaft holder.
477-8223	1	Ovality Kit Horisontal	477-8264	1	Ovality Kit Spring
		Ext. Arm, 160 mm	477-8263	1	Ovality Kit Spring cover
477-8224	3	Ovality Kit Horisontal	477-8271	1	
477-8221	1	Ext. Arm, 320 mm  Ovality Kit Horisontal	477-8235	6	Ovality Kit Vertical Ext. arm, 300 mm, Ø15 mm
4//-0221	ı	Ext. Arm, 40 mm	477-8213		Ovality Kit Outer cylin-
477-8222	1	Ovality Kit Horisontal Ext. Arm, 80 mm	, 0213		der, arm holder, Right/ Left Hand



ADDRESS Jarnvagsgatan 19, SE-543 50 Tibro SWITCHBOARD +46 504 400 40 · FAX +46 504 141 41 WEB prismatibro.se E-MAIL contact@prismatibro.se