



NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

CERTIFICATE OF APPROVAL No 6/108/46

This is to certify that an approval has been granted by the Commission that the pattern of the

Toledo Model 7530 Weighing Instrument

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne, Victoria, 3207

is suitable for use for trade.

The approval is subject to review on or after 1/7/88.

Instruments purporting to comply with this approval shall be marked NSC No 6/108/46.

The approval may be withdrawn if instruments are used other than as described in the drawings and specifications lodged with the Commission.

Conditions of Approval

1. The number of scale intervals applicable to the whole instrument shall be no greater than the number of verification scale intervals approved for the basework, or the load cell(s) or the headwork, whichever is the smallest.
2. The load cells to be used shall be subject to regular certification by the Commission.
3. The weighbridge installed as approved herein or with substitute load cells and/or indicator shall comply with NSC General Certificate No 6/108/0 for full load cell weighbridges.

Signed

Executive Director

Descriptive Advice

Pattern: approved 12/5/83

- A Toledo model 7530 self-indicating weighbridge in various capacities and sizes, using Toledo model 0752 load cells, part numbers 118687 or 110501 of 22.7 tonnes maximum capacity, and a Toledo model 8132 digital indicator, and approved for use with up to 3000 scale intervals.

Technical Schedule No 6/108/46 dated 30/1/84 describes the pattern.

30/1/84

...../2

Filing Advice

Certificate of Approval No 6/108/46 dated 10/6/83 and its Technical Schedule, Test Procedure and Figures 1 and 2 are replaced by this Certificate, Technical Schedule and Test Procedure, and may be destroyed. Figure 3 dated 10/6/83 should be renumbered as Figure 1 and retained. The documentation for this approval now comprises:

Certificate of Approval No 6/108/46 dated 30/1/84
Technical Schedule No 6/108/46 dated 30/1/84
Test Procedure No 6/108/46 dated 30/1/84
Figure 1 dated 10/6/83 (originally Figure 3).



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/108/46

Pattern: Toledo Model 7530 Weighing Instrument

Submitter: Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne, Victoria, 3207.

1. Description of Pattern

A self-indicating weighbridge in various capacities and sizes. The weighbridge consists of a basework using Toledo model 0752 load cells of 22.7 tonnes maximum capacity (Figure 1) and a Toledo model 8132 digital indicator. The dead load of the deck is 2 t/m for concrete and 0.6 t/m for steel construction. The steel deck version is known as model 7520.

1.1 Model 0752 Load Cells

Load cell part number 118687 is separately approved under NSC No S143.

1.1.1 Specifications

	<u>Part No. 110501</u>	<u>Part No. 118687</u>
Maximum capacity	22.7 t	22.7 t
Maximum number of verification scale intervals	2500	3000
Minimum dead load	1.14 t	1.14 t
Minimum value of verification scale interval	1.7 kg	1.7 kg
Input impedance (nominal)	825 Ω	825 Ω
Supply voltage (AC or DC)	10 or 15 V	10 or 15 V
Output rating (nominal)	2 mV/V	2 mV/V
Number of leads	6*	6*

The cable is of various lengths to suit the installation.

*There is also a shield cable.

1.1.2 Load Cell Marking

The following is the minimum data required to be marked on the load cell:

Manufacturer's name or mark
Model number and part number
Serial number
Maximum capacity
NSC approval number

1.2 Indicator

Toledo model 8132 digital indicator displaying up to 3000 scale intervals, with or without an output socket for the connection of peripheral or auxiliary equipment, and with functions as described in the documentation of Approval No S102. The indicator is also approved for use without any tare facility.

#The requirement to mark the NSC approval number on the load cell will be effective on these cells as of 31/5/84 to allow the use of nameplates already in stock.

1.3 Markings

The instrument is marked with the following data, in one clearly visible location:

Manufacturer's name or mark	
Model number of instrument	
Serial number of instrument	
NSC approval number	NSC No 6/108/46
Accuracy class	III
Maximum capacity in the form:	Max
Minimum capacity in the form:	Min
Verification scale interval in the form:	e = d =
Maximum subtractive tare in the form:	T = -
Load cell NSC approval number)	
Headwork NSC approval number) where appropriate	
Basework NSC approval number)	

Load cell serial numbers may be marked on a nameplate attached to the indicator or marked on metal tags attached to the indicator via a lead and wire seal.

TEST PROCEDURE 6/10B/46

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

- ± 0.5e for loads between 0 and 500e;
- ± 1.0e for loads between 501e and 2000e; and
- ± 1.5e for loads above 2000e.

1. Zero Range

Check that the range of the zero adjustment is not more than 4% of the maximum capacity ($\pm 2\%$ approximately). With zero balance indicated, apply a load of, say, 2.5% of maximum capacity to the instrument, and attempt to set zero; this should not be possible.

2. Zero Balance

Check by means of the Commission's digital zero test as set out in Document 104 that, when the zero light is illuminated, zero is set within 0.25 scale intervals.

3. Range of Indication

The maximum mass indicated should not exceed by more than 10 scale intervals the maximum capacity (Max); above this indicated mass the indicator should be blank or show non-numerical characters.

4. Test Loads

Test loads are to be applied to the instrument in not less than 5 approximately equal steps increasing to maximum capacity, followed by decreasing loads of not less than 5 approximately equal steps.

The instrument should display these loads within the applicable tolerance as listed above.

5. Tare

Attempt to tare a mass above the maximum mass indicated as determined in Test 3 above - this should not be possible.

6. Stability Test

Using the heaviest and most concentrated rolling load intended to be weighed (heaviest axle loading) conduct a stability test on one end of the weighbridge platform beyond the end cells; lifting of the opposite end should not be apparent.

Repeat this test at the other end of the weighbridge.

National Standards Commission



NOTIFICATION OF CHANGE

VARIOUS CERTIFICATES OF APPROVAL

The following changes are made to the approval documentation for various approvals

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne VIC 3207.

In the Certificates and Technical Schedules listed overleaf, the following changes should be made: (Note: Only current approvals are listed.)

1. The submitter should be changed to read;

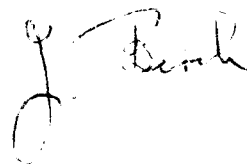
Mettler Toledo Limited

(the address remains unchanged)
2. All references to 'Toledo' instruments or components should be amended to read 'Toledo (or Mettler or Mettler Toledo)'.

NOTE: Any 'Toledo' instrument or component described in the approval documentation may now also be known as 'Mettler or Mettler Toledo'.

APPROVAL NUMBER	PATTERN
6/4C/65	8214 Weighing Instrument
6/4C/68	8215 Weighing Instrument
6/4D/242	8421 Weighing Instrument
6/9C/2A	2191 Weighing Instrument
6/9C/24A	2503 Weighing Instrument
6/9C/28	2020 Weighing Instrument
6/9C/24A 44A	2985 Weighing Instrument
6/9C/76	2295 Weighing Instrument
6/9C/87	2375 Weighing Instrument
6/9C/97	2155 Weighing Instrument
6/9C/98	9118 Weighing Instrument
6/9C/206	6303 Weighing Instrument
6/9C/231	1938 Weighing Instrument
6/10B/46A	7560 Weighing Instrument
6/14B/9A	2352 Hopper Weighing Instrument
6/18/21	2299 Overhead Weighing Instrument
S253	8530 Digital Indicator
S266	8520 Digital Indicator
S283	8510 Digital Indicator
S111A	0721 Load Cell
S112A	0723 Load Cell
S143	0752 Load Cell
S172	0725 Load Cell
S211	0742 Load Cell
S252	0760 Load Cell
S264	0752 Load Cell
S268	RLC 5000 Load Cell

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.





NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/108/46

CHANGE No 1

The following change is made to the description of the Toledo Model 7530 Weighing Instrument given in Certificate and Technical Schedule No 6/108/46.

All references to load cell part number 1105001 should be changed to read 110501.

Signed


Executive Director

28/7/83



NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/108/46

CHANGE No 2

The following change is made to the approval documentation for the

Toledo Model 7530 Weighing Instrument

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne Victoria 3207.

Certificate of Approval No 6/108/46 dated 10/6/83 and its Technical Schedule, Test Procedure and Figures 1 and 2 are replaced by the attached documentation, and may be destroyed.

Figure 3 dated 10/6/83 should be renumbered as Figure 1 and retained.

Note: Refer to the Filing Advice in the attached Certificate.

Signed

Executive Director

30/1/84



6/10B/46
29/4/85

NATIONAL STANDARDS COMMISSION

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/10B/46

CHANGE No 3

The following change is made to the approval documentation of the

Toledo Model 7530 Weighing Instrument

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne Vic 3207.

In Test Procedure No 6/10B/46 dated 30/1/84,
paragraph 6. Stability Test should be deleted.

Signed

Executive Director



NATIONAL STANDARDS COMMISSION

6/10B/46
7/11/86

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/10B/46

CHANGE No 4

The following changes are made to the approval documentation for the
Toledo Model 7530 Weighing Instrument

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne Victoria 3207.

1. In Certificate of Approval No 6/10B/46 dated 30/1/84, amend the description of the pattern to read, in part;

"... using Toledo model 0752 load cells and a model 8132 indicator ..."

2. In Technical Schedule No 6/10B/46 dated 30/1/84:

a) Amend clause 1. Description of Pattern to read, in part;

"... using Toledo model 0752 load cells (Figure 1) and ..."

b) Amend clause 1.1 Model 0752 Load Cells to read;

"Model 0752 load cells (other than the 22.7 t capacity; part number 118687, as listed below) are separately approved under NSC No S143."

Signed

Executive Director



NATIONAL STANDARDS COMMISSION

6/10B/46
29/6/87

NOTIFICATION OF CHANGE

CERTIFICATE OF APPROVAL No 6/10B/46

CHANGE No 5

The following change is made to the approval documentation for the
Toledo Model 7530 Weighing Instrument

submitted by Toledo Scale (Australia) Ltd
525 Graham Street
Port Melbourne Victoria 3207.

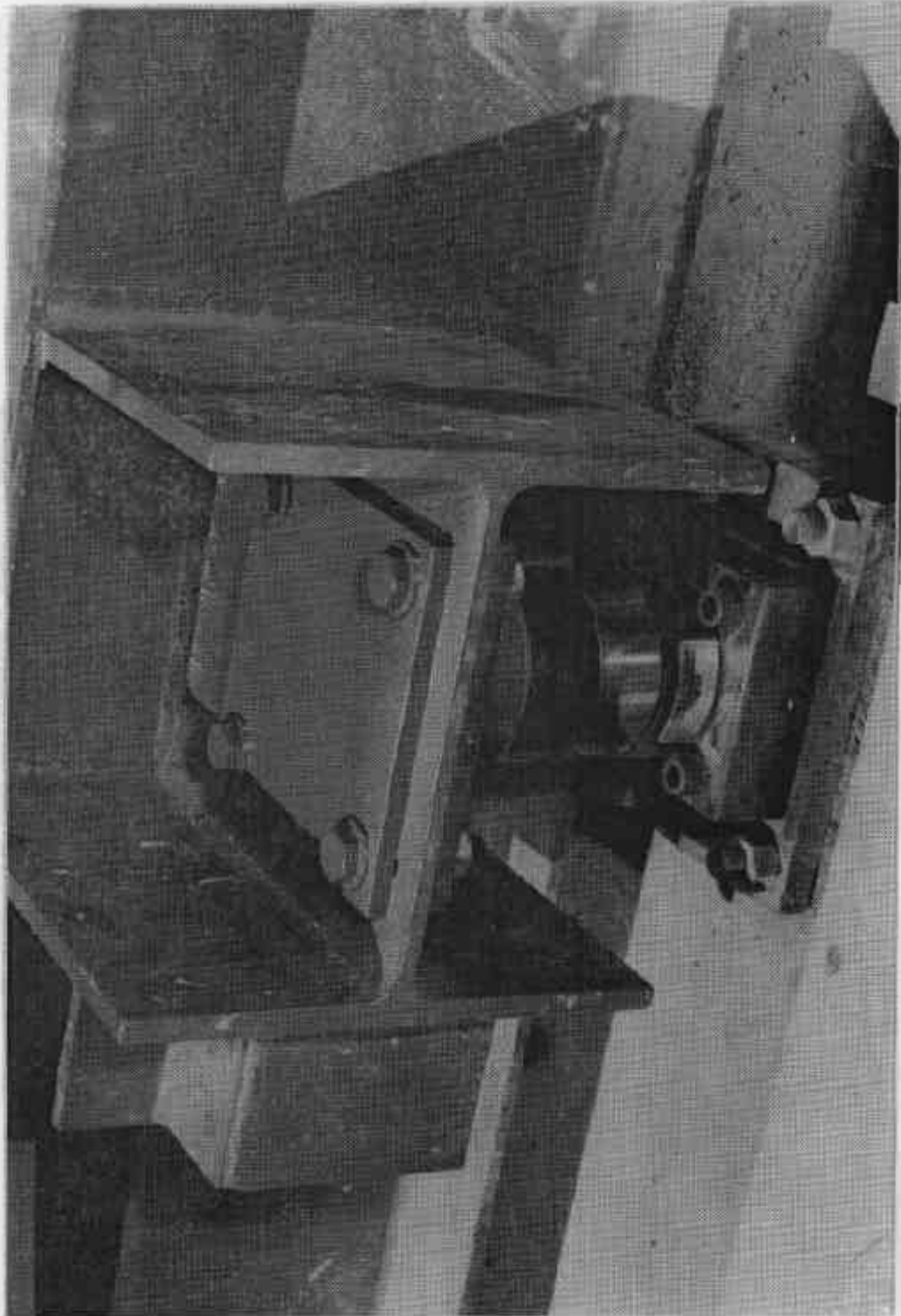
1. In Technical Schedule No 6/10B/46 dated 30/1/84:

Delete the 3rd sentence from clause 1. Description of Pattern to remove any reference to the deadload of the deck.

Signed

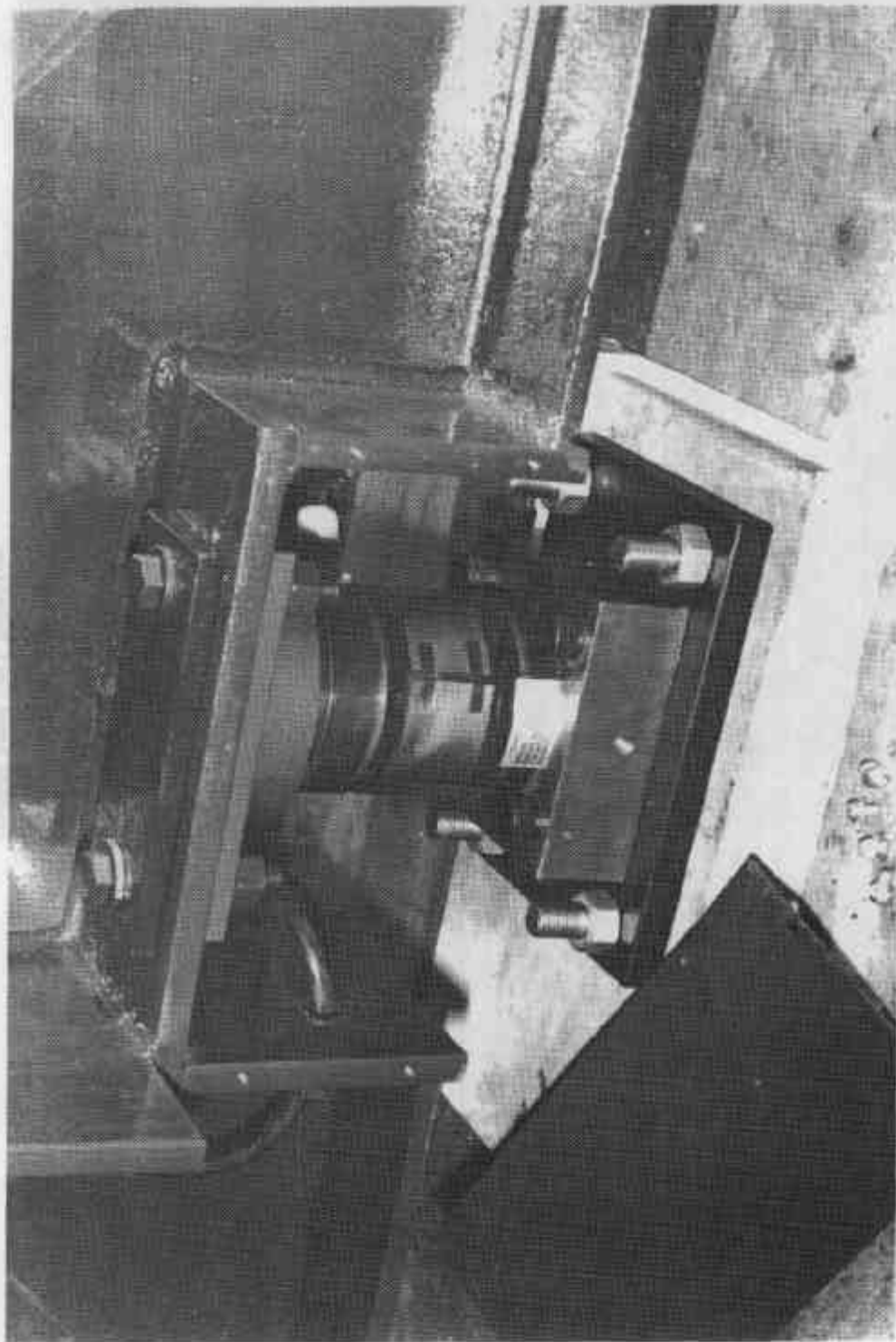
Executive Director

FIGURE 6/108/46 - 1



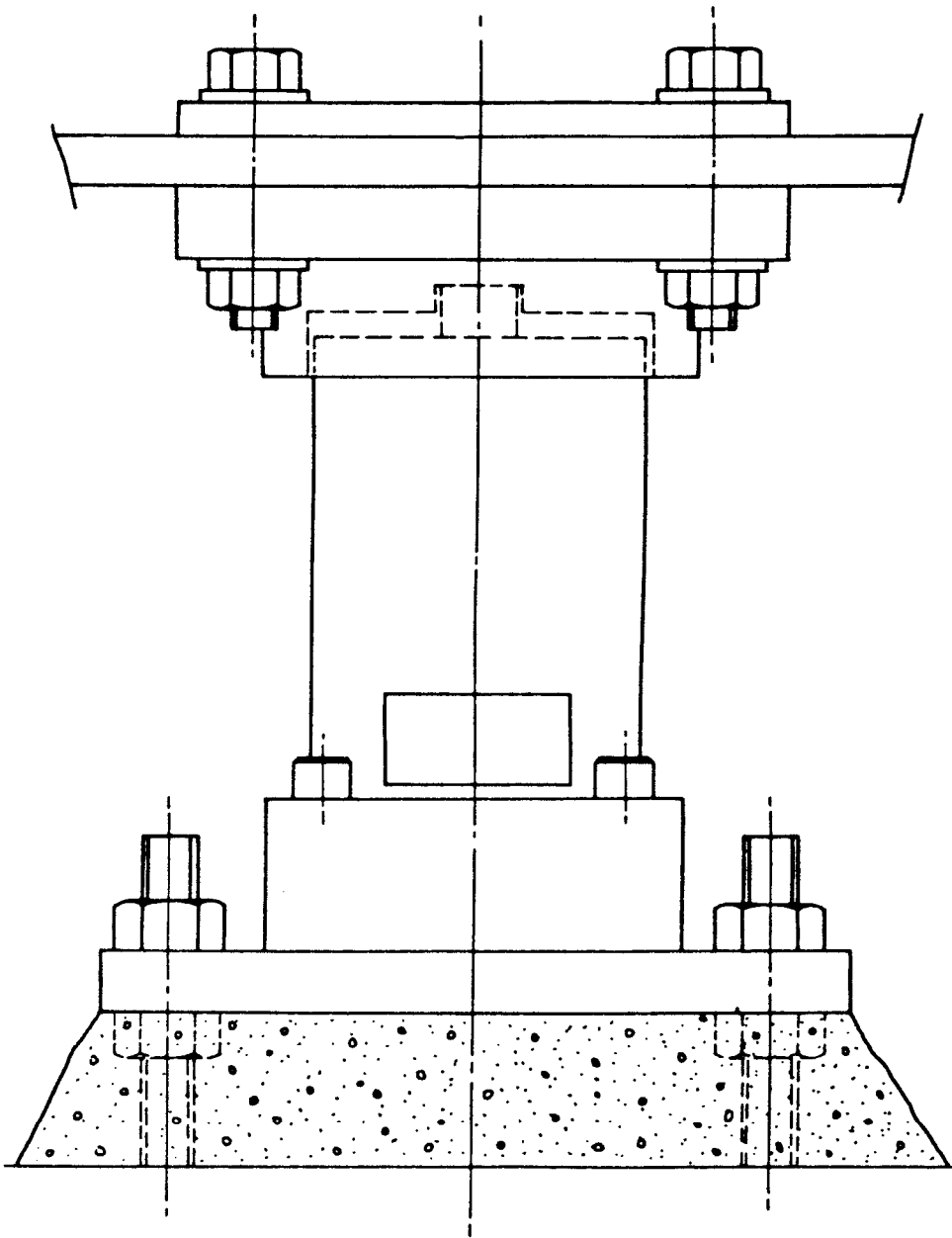
Typical Load Cell Mounting

10/6/83



An Alternative Load Cell Mounting - Sunshield Removed

FIGURE 6/10B/46 - 3



Schematic Of A Typical Load Cell Mounting

10/6/83