

INFO CENTRE

Vehicle Mounted Display

INSTRUCTIONS



Haldex

INTRODUCTION

INFO CENTRE is a side of trailer mounted diagnostic unit used for readout of odometer and fault codes, plus other information as available in the ABS Electronic Control Unit (ECU).

The INFO CENTRE is normally connected permanently to the ECU's diagnostic connection. While the ECU is powered from its normal sources (stoplight or permanent) information is transferred to the Info Centre's memory, which can be recalled. Power is supplied from the vehicle systems via the ECU diagnostics connector.

INFO CENTRE comprises an LCD (Liquid Crystal Display) and two buttons marked up/down and right. The up/down button accesses the next main menu item, the left button, marked right arrow, is used for sub menu items. For adjustment of settings a watch style procedure is followed; the left button is held down for 2 seconds, where upon the first digit flashes and can then be increased by pressing the up/down button. The next digit is then selected, and so on.

INFO CENTRE also has an internal battery which allows readout of information (including fault indication) when the trailer is uncoupled and unpowered. It is housed in a plastic enclosure provided with a cover boot for enviromental protection.

Functions:

Odometer:

Total distance
Trip distance
Service interval
Tire scale setting

Diagnostic

OK if no fault codes
Current fault code
Stored fault codes
Sensor check - Wheel speed bars

ECU

Information:

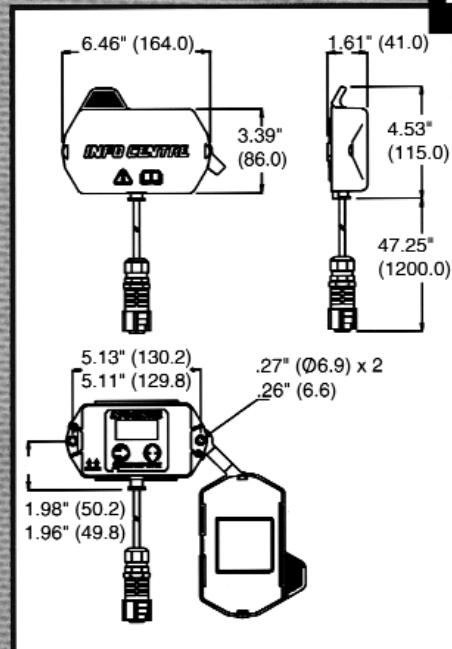
Serial number
Product code
Configuration code

CHASSIS INSTALLATION

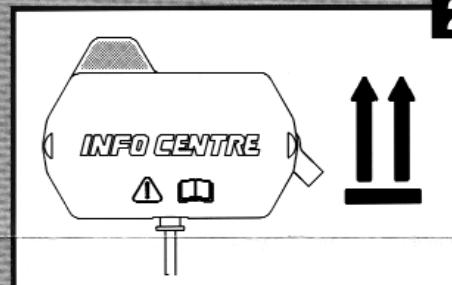
1 Assembly and Mounting details

PART NUMBER
- 364 317 001

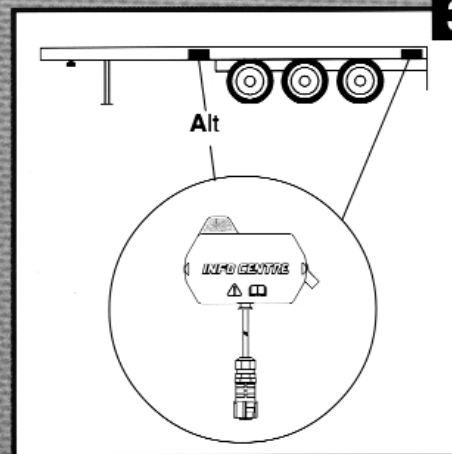
Mass of Assembly
= 1.54 lbs. (0.7 Kgs)



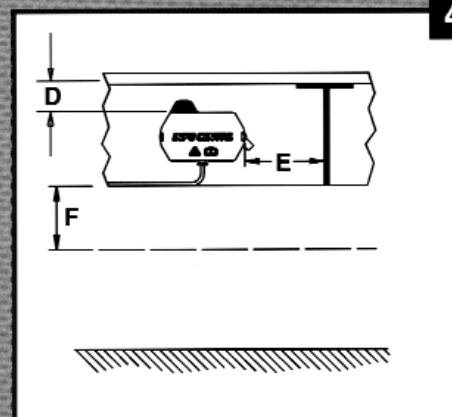
2 Unit must be mounted vertically.



3 The unit should be positioned in an accessible area where it can be connected by the 47.25" (1.2m) cable to the chassis diagnostic plug.



4 Care should be taken to provide reasonable clearance to the Info Centre for opening the cover or replacement of the unit.



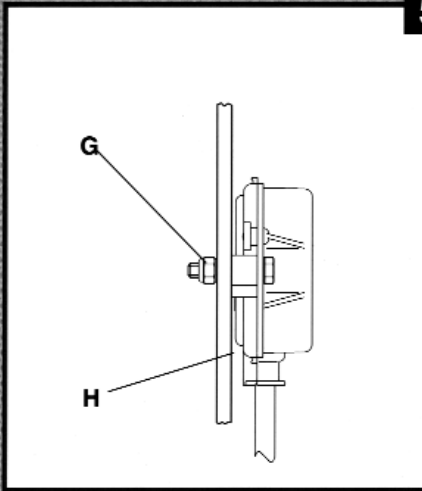
D = 3.94" (100mm)
Minimum.

E = 7.87" (200mm)
Minimum.

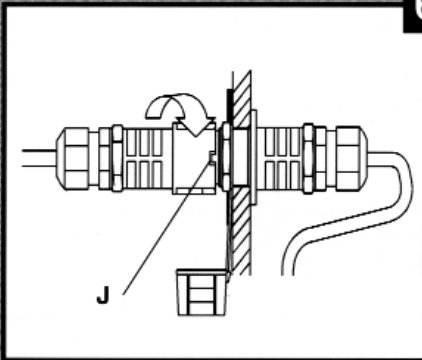
F = Units and cabling
to be above axle
centre line.

CHASSIS INSTALLATION

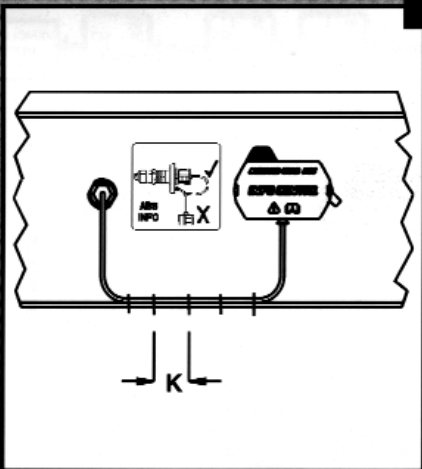
- 5** Should be mounted on a flat surface. Mounting holes to be drilled .256" (6.50mm) diameter to avoid stress at the box from incorrect location. Use M6 x 1.00 grade 8.8 bolts and self locking nuts with plain washer 'G'. Tightening torque 9-11 ft. lbs. (12-15Nm). Any additional bracket design 'H' to be as firm as possible.



- 6** Identify orientation of keyways on Info Centre socket and connect together. Tighten gland nut on Info Centre socket and ensure locking tab 'J' is located.

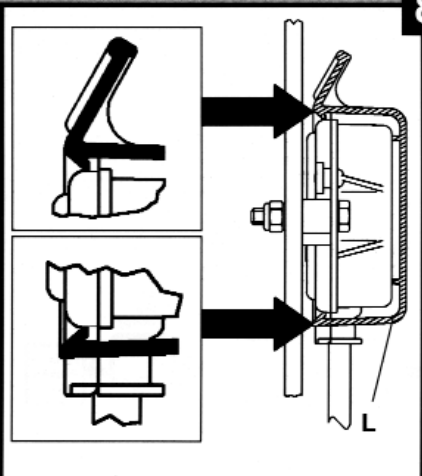


- 7** Cable should be secured along the chassis rail at not more than 7.87" (200mm) intervals 'K'.



N.B. All cables should run 'UP' to the chassis plug and Info Centre.

- 8** Mate cover 'L' to Info Centre and click into position via top and bottom clips. **MAKE SURE** both clips are fully engaged.



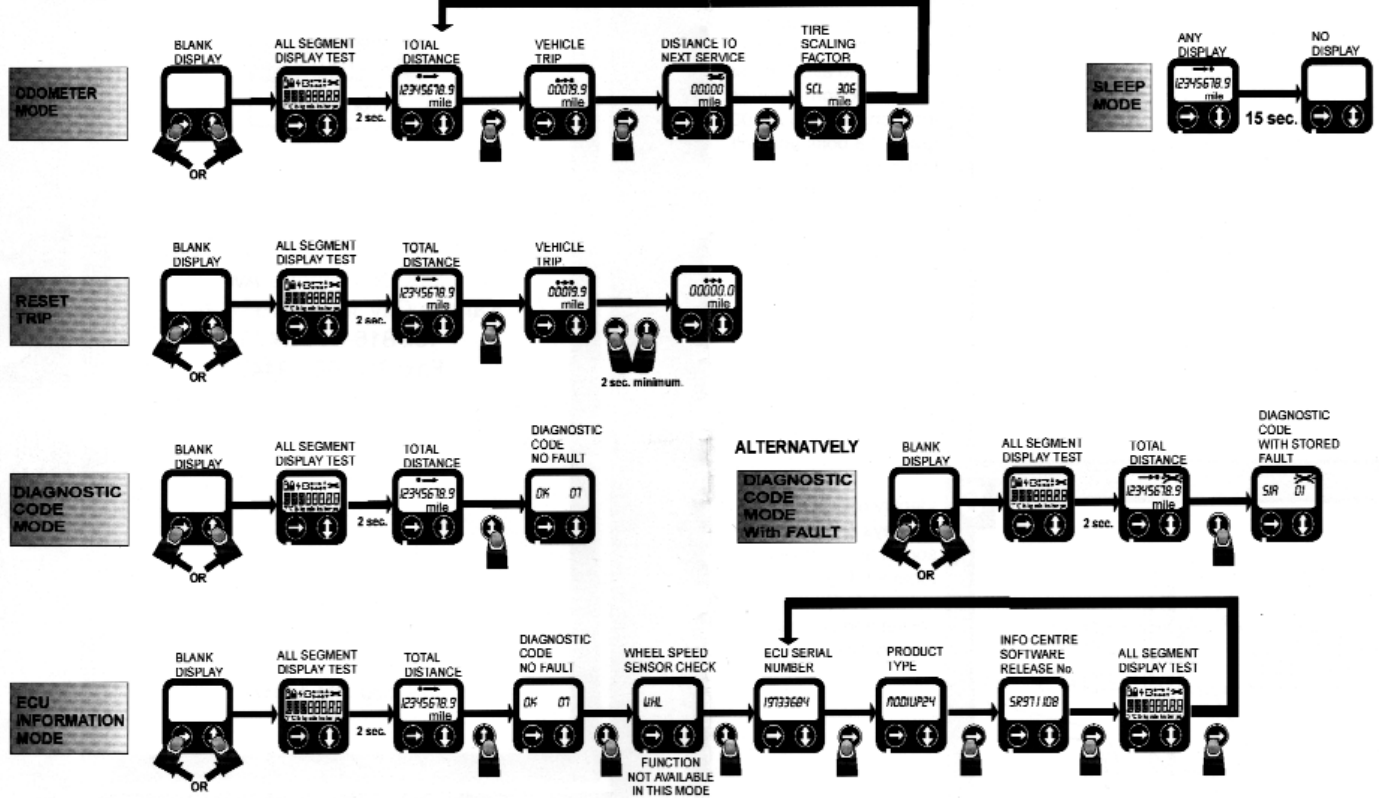
NOTES

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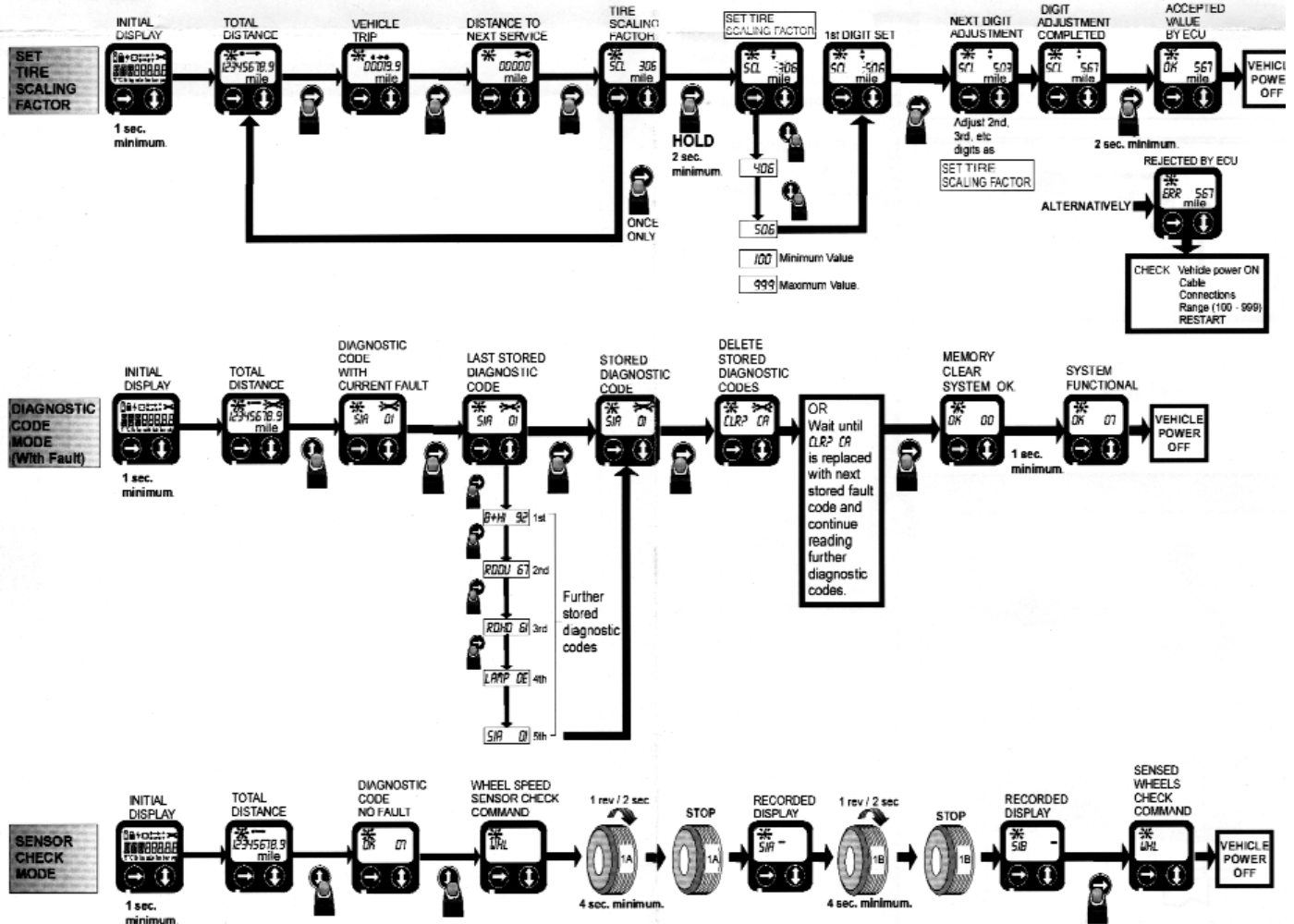
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10930 N. Pomona Ave.
Kansas City, MO 64153-1297
Tel: 816-891-2470
Fax: 816-891-9447

3-03 150 IN-HOUSE L31145

VEHICLE POWER OFF



VEHICLE POWER ON



INSTRUCTIONS

Press the function buttons **once only** unless otherwise indicated.

NOTE:

On initial vehicle power up of system an all segment test is displayed for 1 seconds.

When BUSY message appears do not press any function button.

THE DISPLAY



THE LEGENDS



BATTERY: Internal Battery Monitor
- OFF = OK
- ON = Total mileage and fault code functions only (INFO CENTRE internal battery failure.)
- FLASHING = Odometer non functioning (ABS ECU internal battery failure.)



PIN: Security Lock - Not implemented
- Used for user coded display / entry of data



POWER: Vehicle Power
-ON = Vehicle Supply
-OFF = No Vehicle supply
-FLASHING = ABS ECU communicating to Info centre



BELLOWS: Air Suspension - Not implemented
- Bogie load, Load apportioning, Height control, Manual raise/lower



ODOMETER DISPLAY
- Total distance
- Trip distance



ADJUSTMENT ARROWS: Editing Mode
-ON = Indicates that information may be user changed.



SERVICE: Service
-ON = Scheduled service due. ABS warning lamp flashes three times at each power up, when service interval exceeded.
-FLASHING = Current ABS fault

DIAGNOSTIC CODES

Code displayed

BLANK DISPLAY

No supply on ignition switched line.

Possible causes:

Fuse blown. INFO CENTRE or cable fault. Open circuit B-Bar displayed = Sensor output O.K.
Bar not displayed = Sensor output too low

SENSOR BAR

OK	00	System is O.K. vehicle is moving
S1A	01	1A Sensor/wiring open or short circuit
S1B	02	1B Sensor/wiring open or short circuit
S2A	03	2A Sensor/wiring open or short circuit
S2B	04	2B Sensor/wiring open or short circuit
S3A	05	3A Sensor/wiring open or short circuit
S3B	06	3B Sensor/wiring open or short circuit
OK	07	System is O.K. vehicle is stationary
RET	08	Retarder / Wiring open circuit
RET	09	Retarder / Wiring short circuit
RIDE	0C	Reset to ride / Wiring short circuit
RIDE	0A	Reset to ride / Wiring open circuit
LAMP	0E	Warning lamp circuit fault

LOW SENSOR OUTPUT GROUP

S1A	11	1A Sensor system fault
S1B	12	1B Sensor system fault
S2A	13	2A Sensor system fault
S2B	14	2B Sensor system fault
S3A	15	3A Sensor system fault
S3B	16	3B Sensor system fault

Possible causes:

Sensor worn, maladjusted sensor, wiring open or short circuit.

EXC

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Incorrect exciter type.

Possible causes: Exciter tooth count.

INTERMITTENT LOW SENSOR OUTPUT GROUP

S1A	21	1A Sensor system fault
S1B	22	1B Sensor system fault
S2A	23	2A Sensor system fault
S2B	24	2B Sensor system fault
S3A	25	3A Sensor system fault
S3B	26	3B Sensor system fault

Possible causes:

Loose sensor, connection, bracket or exciter. Dented exciter. Maladjusted sensor or worn sensor cable insulation. Lamp signalled by external device.

EXT

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ONE WHEEL WITH SLOW RECOVERY GROUP

XSEn	40	Sensor wiring crossed across an axle
SLW	41	Slow recovery of one wheel of red channel
SLW	42	Slow recovery of one wheel of blue channel
SLW	43	Slow recovery of one wheel of yellow channel

Possible causes:

Slow brake release, foundation brake mechanical faults, dry bearings, broken spring, restricted piping. Modulator fault. Check for kinks and blockages etc. Incorrect piping, Wiring.

OPEN CIRCUIT MODULATOR SOLENOID OR SOLENOID WIRING GROUP

RDHd	61	Hold solenoid circuit fault, red channel
BUHd	62	Hold solenoid circuit fault, blue channel
YEHd	63	Hold solenoid circuit fault, yellow channel
RDDu	67	Dump solenoid circuit fault, red channel
BUDu	68	Dump solenoid circuit fault, blue channel
YEDu	69	Dump solenoid circuit fault, yellow channel

SHORT CIRCUIT ACROSS MODULATOR SOLENOID OR SOLENOID WIRING GROUP

RDHd	71	Hold solenoid circuit fault, red channel
BUHd	72	Hold solenoid circuit fault, blue channel
YEHd	73	Hold solenoid circuit fault, yellow channel
RDDu	77	Dump solenoid circuit fault, red channel
BUDu	78	Dump solenoid circuit fault, blue channel
YEDu	79	Dump solenoid circuit fault, yellow channel

MODULATOR SOLENOID WIRING OR SOLENOID SHORT TO B+ GROUP

SOL	80	Poor insulation in the modulator solenoid or wiring fault.
RDHd	81	Hold solenoid circuit fault, red channel.
BUHd	82	Hold solenoid circuit fault, blue channel.
YEHd	83	Hold solenoid circuit fault, yellow channel.
RDDu	87	Dump solenoid circuit fault, red channel.
BUDu	88	Dump solenoid circuit fault, blue channel.
YEDu	89	Dump solenoid circuit fault, yellow channel.

SUPPLY VOLTAGE GROUP

B+LO	90	Supply voltage at ECU less than 9v when a solenoid is energized.
ISOI	91	Faulty supply from ISO 7638 Pin 1 or fuse blown.
B+HI	92	Supply voltage at the ECU greater than 16v.
ECU	93	Internal ECU fault.
ECU	99	Internal ECU fault.

SYSTEM FUNCTION GROUP

RIDE	A1	Reset to ride height
RET	A2	Retarder
SPDL	A3	Speed Lock
NLV	A4	No Load sensing Valve
SLH1	A5	Select Low High Channel 1
SLH2	A6	Select Low High Channel 2
SLH3	A7	Select Low High Channel 3
MSLh	A8	Modified Select Low High

VARIOUS CODES

TIRE SCALING FACTOR

TRAILER TIRE SIZES USA/Canada	SCALING FACTOR 100T (miles)	SCALING FACTOR 100T (km)	SCALING FACTOR 80T (miles)	SCALING FACTOR 80T (km)
80T smallest tire size			579	360
215/75R17.5			543	338
8R17.5			538	334
275/65R17.5HC			527	328
8.5R17.5			524	326
245/70R17.5			523	325
235/75R17.5			523	325
225/70R19.5			521	324
8.25R15			495	308
9R17.5HC			495	308
10R17.5			490	304
265/70R19.5			483	300
285/70R19.5			470	293
100T smallest tire size	580	360		
305/70R19.5	574	357	459	286
11R17.5HC	568	353	454	283
10.00R15TR	566	352	453	282
255/70R22.5	566	352	453	282
275/70R22.5	545	339	436	271
10R22.5	520	323	416	259
9.00R20	519	323	415	258
295/75R22.5	518	322	414	258
285/75R24.5	504	313	403	251
295/80R22.5	503	313	402	250
11R22.5	502	312	402	250
10.00R20	501	312	401	249
315/80R22.5	491	305	393	244
80T largest tire size			391	243
11.00R20	488	303		
305/75R24.5	488	303		
11R24.5	478	297		
10.00R22	478	297		
12.00R20	472	294		
425/65R22.5	471	293		
11.00R22	466	290		
100T largest tire size	391	243		

USEFUL NUMBERS:

1 mile = 1.6093 km
1 km = 0.6214 miles

SCALE FACTOR (SF) EQUATION FOR OTHER TIRE SIZES:

$$SF = (1000 / Rc) \times (T / 100)$$

Rc = Rolling circumference in metres
T = Exciter actual tooth count

PRODUCT IDENTIFICATION and CONFIGURATION CODES

PRODUCT TYPE GROUP

MODAL	MODAL (12v or 24v)
MOD1P 12	MODULAR 1 Permanent power supply 12v
MOD1S 12	MODULAR 1 Stoplight power supply 12v
MOD1UP12	MODULAR 1 Upgrade 12v
MOD2 12	MODULAR 2 12v
MOD2 24	MODULAR 2 24v
LT	Light Truck ABS
MOD1PL24	MODULAR 1 Plus 24v
MOD1UP24	MODULAR 1 Upgrade 24v

CONFIGURATION CODES

Figures in parenthesis indicate sensing is disabled when the axle is lifted.

Code Function Axle Lifted Sensors Used Modulators Used