



CITY AND COUNTY OF SAN FRANCISCO
 San Francisco Municipal Transportation Agency
 Request for Proposals
 THE PROCUREMENT OF
 30-Foot, 40-FOOT AND 60-FOOT LOW FLOOR
 DIESEL HYBRID COACHES

Proposal Section	Title	Bid Submission Requirements
3-G	Driver's Station and Controls	1) Detail the design that has gone into making the driver's station a safe, comfortable place to work with controls within easy reach. Detail where hybrid-electric system controls differ from conventional bus controls. 2) Provide fully dimensioned plan and elevation drawings of the driver's station, meeting SFMTA's requirements, that you plan to supply; include the barrier, seat, steering column, pedals, dashboard and side console, windows, visors, and shades. 3) Supply a drawing of the driver's window. 4) How will the exterior and interior mirrors proposed meet the specification requirements? 5) Describe locations for mounting radio equipment in the driver's station.

Please refer to the attached Sales Information Bulletin which shows the proposed Driver's Area including all controls, compartments, dash layout, driver's station, etc. Two driver control drawings have also been included and highlighted to show the differences in the hybrid-electric system controls. Please note that the Hybrid drawings are very customer specific and are an example only. The highlighted areas will be the only changes to the configuration. Information as requested in regards to the driver's window, mirrors and the proposed SDS box is also included.

SALES INFORMATION BULLETIN

#350-001 | Model: Xcelsior | Lengths: All | Propulsions: All

Driver's Controls

Instrument Panel

Xcelsior comes standard with the industry's first electronic instrument panel. The electronic instrument panel is proprietary to New Flyer and was designed by Parker-Vansco. This automotive-like cluster, housed in a more streamlined, contemporary dash, features integrated inputs, outputs, gauges, LCDs, tell tales and user buttons. It has two CAN ports for built-in pocket gateway functionality and bridges the drivetrain J1939 to chassis J1939.

Additional features:

- USB device port
- Total of 27 inputs:
 - 3 Wake Ups Active High
 - 12 Digital Active Low
 - 6 Digital Active High
 - 5 Analogs (3 Position Switch Settings)
 - 1 Frequency Input
- Total of 3 outputs:
 - 2 High Side Outputs 2 A max.
 - 1 Low Side Output 2.5 A max.
- User-programmable routing table for passing or blocking of J1939 Messages
- User-programmable inputs, outputs, gauges, tell tales, and LCDs
- Uses a standard off-the-shelf USB A-B cable to communicate with a PC
- Uploading, downloading and diagnostics are all done from one point on the vehicle
 - The instrument cluster serves as built-in service tool
- Advanced Diagnostics
 - Real time diagnostics
 - All documentation is stored in the VMMs
 - Monitor all inputs and outputs from one location
 - Monitor analog voltage
 - 'Force' inputs or outputs On or OFF
 - Upload logs and error codes



Steering Wheel

The steering wheel provided is a black hard plastic type with two spokes, 20 inches in diameter and with a center hub horn button.

Steering Column

The steering column is a 900 Series steering column manufactured by Douglas Autotech. A single-lever actuation system provides both tilt and telescoping action. The column tilts up and down in 21° and 7° increments.



SALES INFORMATION BULLETIN

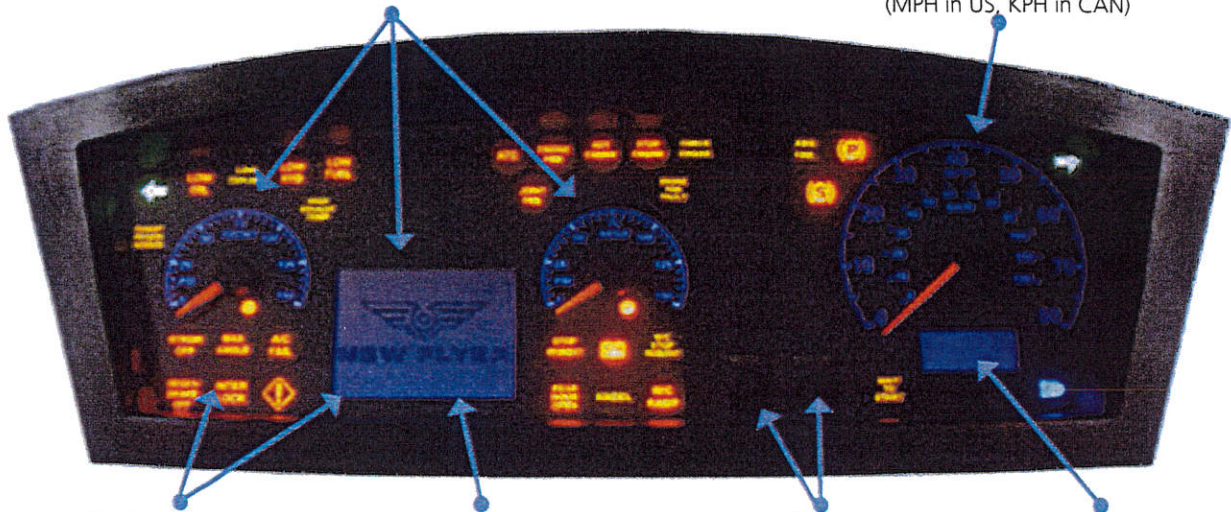
Xcelsior Electronic Instrument Cluster

Air Pressure Gauges

- Two gauges in 40' bus
- Third gauge positioned above LCD screen in 60' bus

Speedometer

(MPH in US, KPH in CAN)



Tell Tales

- Up to 31 standard tell tales illuminate on dash
- Additional selected tell tales are programmed to display on LCD screen

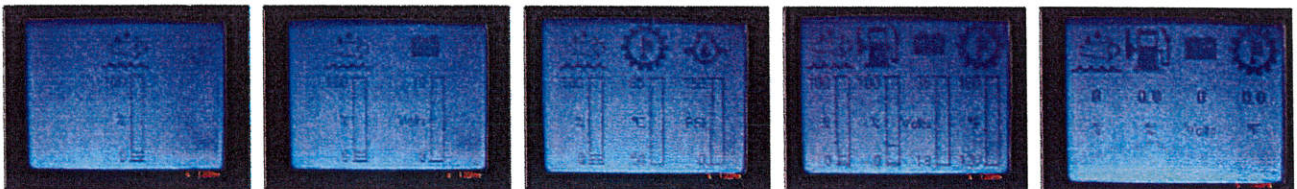
LCD Screen

- Up to four LCD screens
- Each LCD screen displays between 1 to 4 gauges
- 2010 EPA regulation requires that an urea level gauge always be present and in the "1" position

User Buttons

Odometer

Examples of LCD Screen Configurations





NEW FLYER

NEW FLYER
Xcelsior™

SALES INFORMATION BULLETIN

Accelerator & Brake Pedals

Both the accelerator and brake pedals are mounted to the driver's platform in the driver's area at a 45° angle. The brake valve is an E6 with a pressure transducer.

Dimmer & Turn Switch

The turn signals and dimmer switch have easy access for the driver. Both can be activated by floor mounted switches.

Overhead Recessed Panel

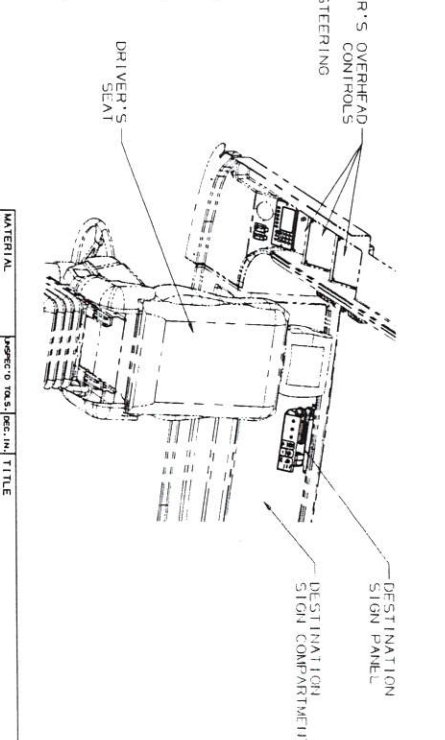
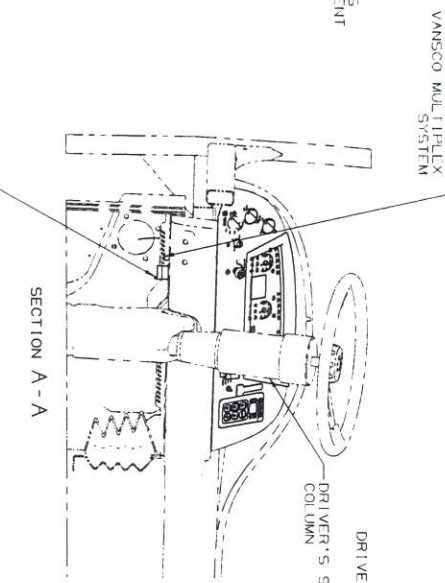
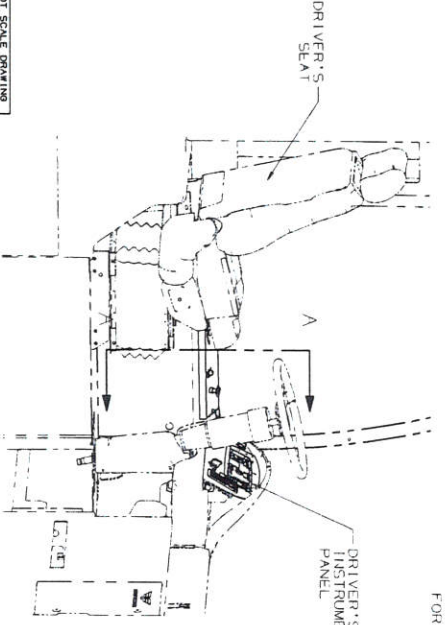
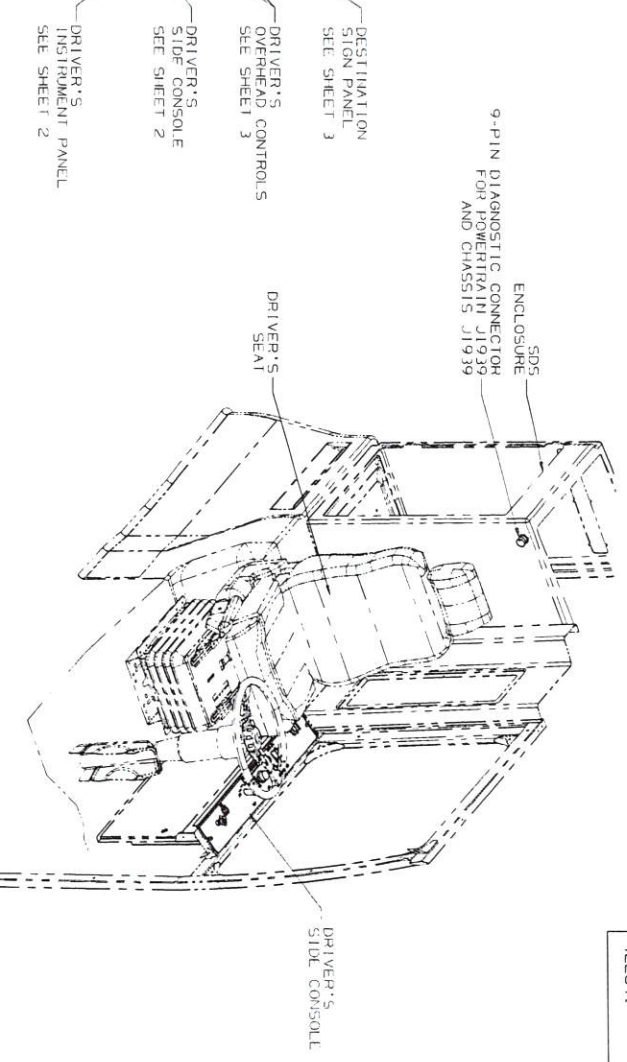
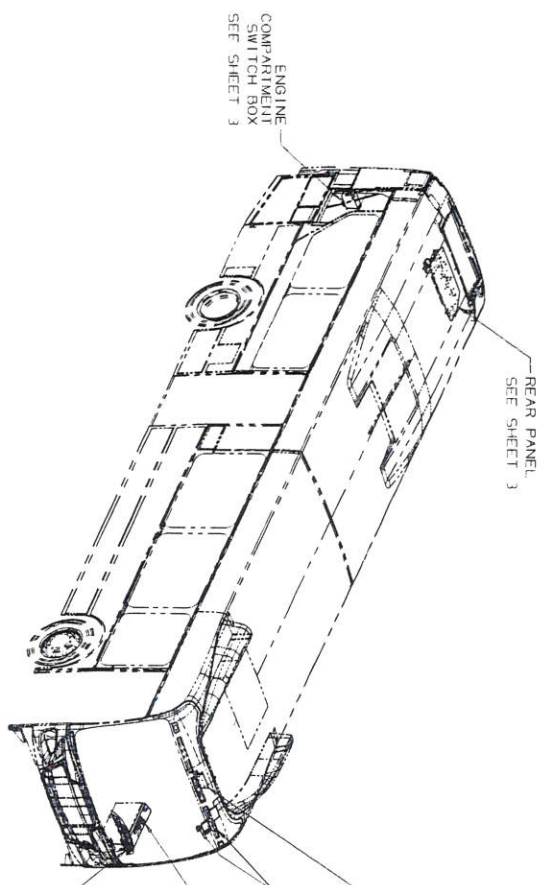
New Flyer has conveniently located a recessed panel on the upper left side of the driver to allow for various electronic features to be easily accessible by the driver. The cables will be concealed behind the panel and routed down the "B" post to the Secure Diagnostic Box behind the driver where the majority of the electronic equipment will be housed. The panel is hidden from the passengers' view.



Standard Diesel Configuration

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NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED MAP BOB SHEET FOR PARTS LISTING



DO NOT SCALE DRAWING

DIMENSIONS IN 1/8" ARE IN MILLIMETERS

THD ANGLE 30°

DRAWN BY JAGEN PALLANTE

DATE: 00-MAR-11

23-FEB-14

REV	SHEET ATTACHED	DESCRIPTION	ECO
0	141	REVISED	032646

MATERIAL	QTY	UNIT	DESCRIPTION
N/A	1	PC	DRIVER'S SEAT
N/A	1	PC	DRIVER'S INSTRUMENT PANEL
N/A	1	PC	DRIVER'S OVERHEAD CONTROLS
N/A	1	PC	DRIVER'S STEERING COLUMN
N/A	1	PC	DRIVER'S SEAT
N/A	1	PC	DRIVER'S INSTRUMENT PANEL
N/A	1	PC	DESTINATION SIGN COMPARTMENT
N/A	1	PC	DESTINATION SIGN PANEL

TREATMENT	NOT REQUIRED	SIMILAR TO	SCALE	TITLE
N/A			NIS	APPROV - DRIVER'S CONTROL
N/A				PART # 422841
N/A				SHEET 1 OF 4

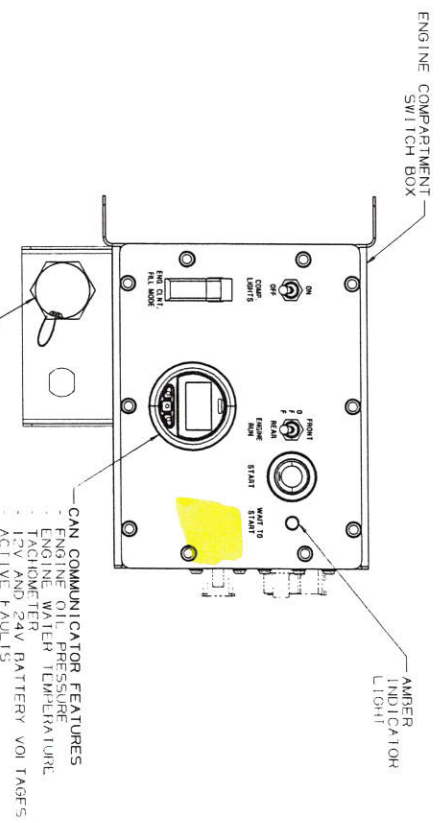
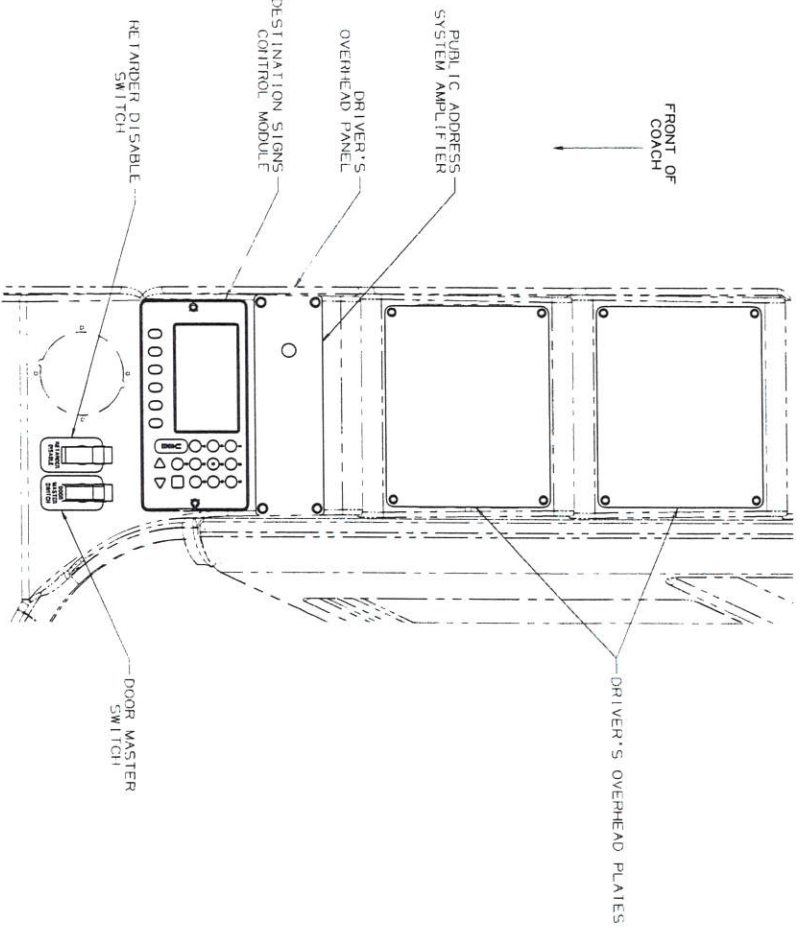
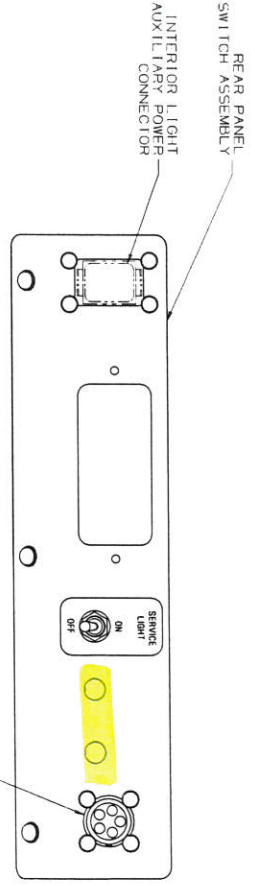
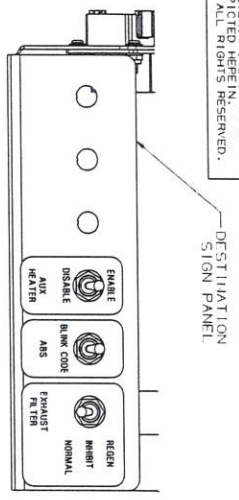
REPORT ALL ERRORS TO ENR. DEPT.

DRAWING NO 422841

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NOTE FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED WPS BOX SHEET FOR PARTS LISTING

DRAWING NO
422841



DO NOT SCALE DRAWING

DIMENSIONS IN 1/8" ARE IN mm

TWO ANGLE

DRAWN BY

JAGEN PALLANTE

DATE: 00-MM-YY

25-FEB-14

REV

SHEET UNNUMBERED

DESCRIPTION

CEN 013246

ECO

MATERIAL	WEIGHT	TREATMENT	NOT REQUIRED	STIMULANT TO	SCALE	MIS	D	SHEET 3 OF 4	REPORT ALL ERRORS TO ENR. DESIG.
N/A	N/A	N/A							

APPROV.-DRIVER'S CONTROL

422841

SCALE MIS

D

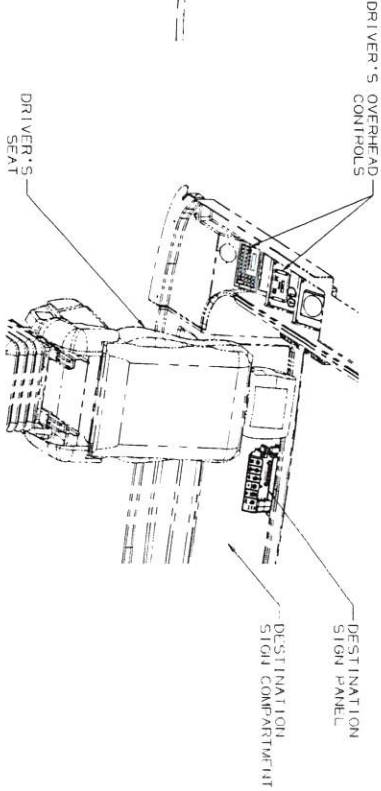
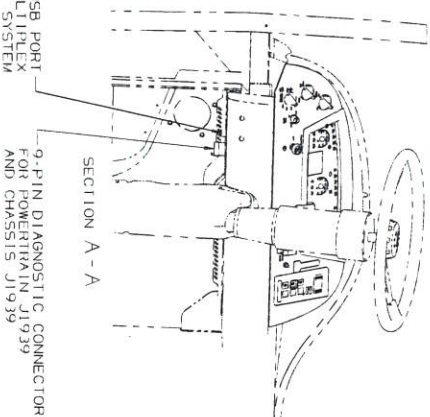
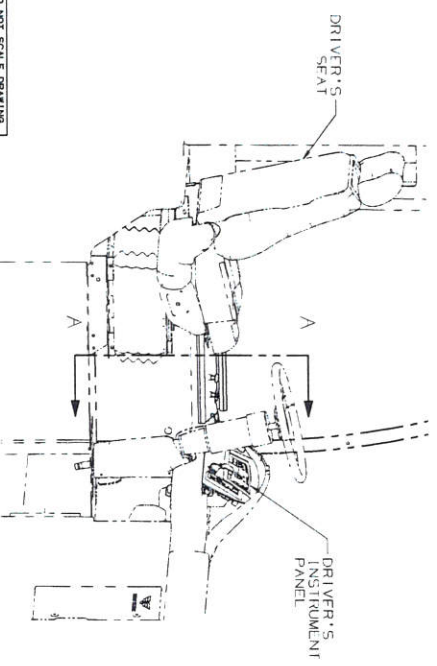
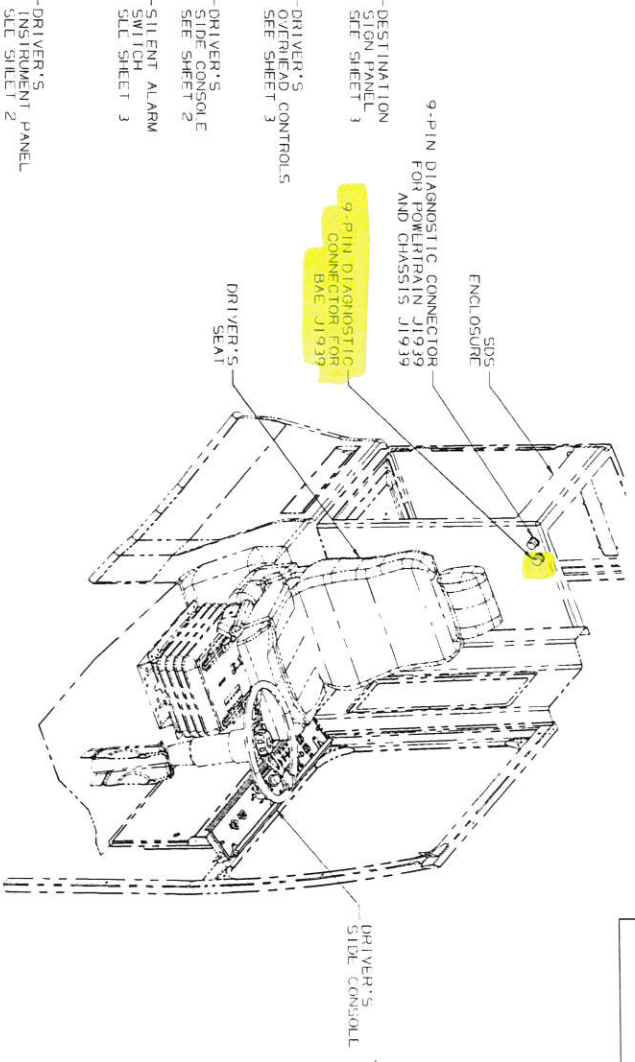
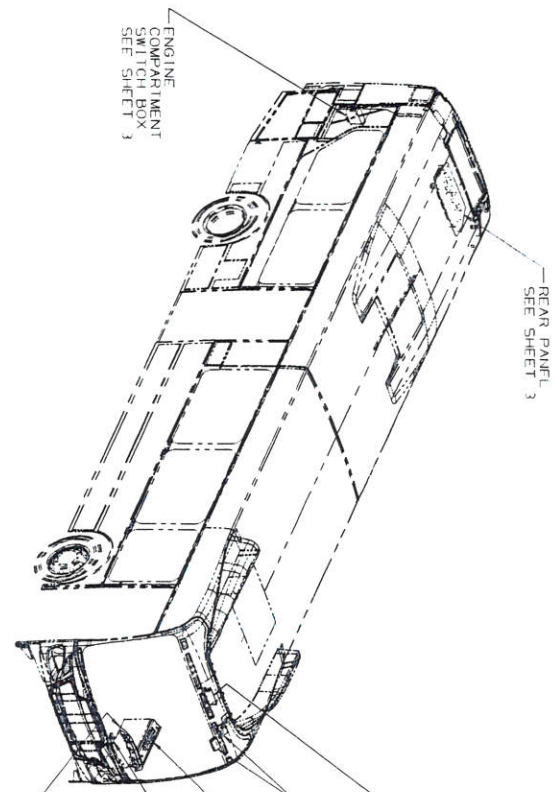
SHEET 3 OF 4

REPORT ALL ERRORS TO ENR. DESIG.

BAE Hybrid Example

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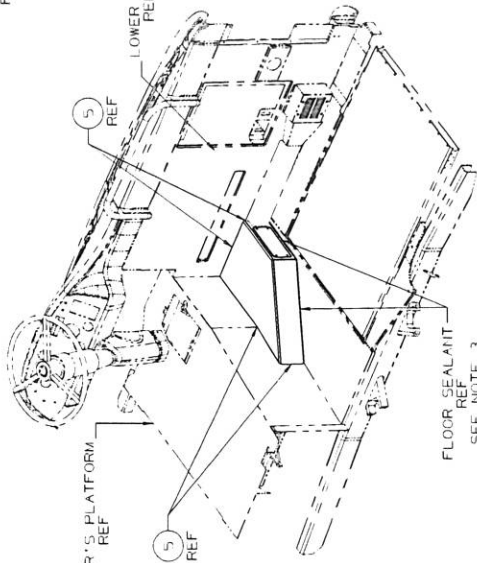
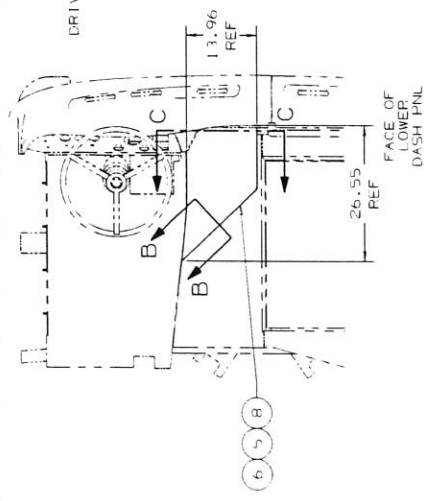


DO NOT SCALE DRAWING	DATE: 27-JUN-14
CONTROLS IN 1	REV: 0 21 SHEET APPROVED: "A"
TRD ANGLE IN 1	REV: 1 21 SHEET APPROVED: "A"
SCALE IN 1:1	DESCRIPTION: ECO
DRAWN BY: ANDREW GATSON	ECO: 037829
DATE: 27-JUN-14	REV: 0 21 SHEET APPROVED: "A"

FOR VANSCO MULTIPLEX SYSTEM		TITLE: APPROV - DRIVER'S CONTROL	
MATERIAL: N/A		PART NO: 560094	
WEIGHT: N/A		SCALE: NTS	
TREATMENT: NONE REQUIRED		SHEET 1 OF 4	
SIMILAR TO: NONE		REPORT ALL ERRORS TO ENR. DEPT.	

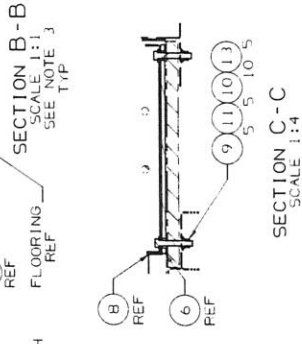
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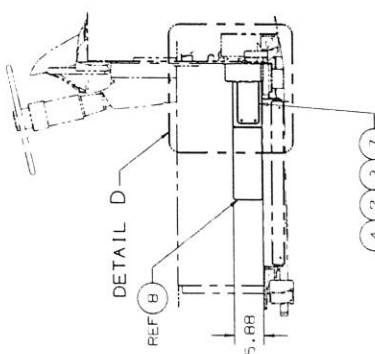
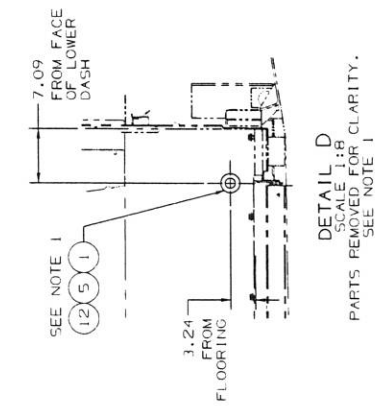


DESIGN REFERENCE:

- XCELSEIOR COACH.
- 6.00" HIGH PEDESTAL.
- STANDARD BLACK AS-150 ANTI-SLIP FLOORING.
- FOR MOUNTING A 4.1" OR 36" GFI CIRCUIT BREAKER.
- NO FAREBOX HOLE PROVISIONS.
- PROVISIONS FOR A STEP HEATER.
- CARBON STEEL PEDESTAL ASSEMBLY ON POLYETHYLENE SPACER SHEET.
- WHEELCHAIR BOX TEST COMPLIANT.



ISO VIEW
REF ONLY



DRILL .161 DIA HOLES USING ACCESS PLATE (ITEM 7) AS A TEMPLATE. PLACE PUSHNUT (ITEM 21) ON SCREWS (ITEM 3) BEFORE INSTALLING.

NOTES:

1. DRILL 2.00 DIA HOLE AT LOCATION SHOWN IN DETAIL D. RE-DRILL THE HOLE IN THE RUBBER FLOORING ONLY TO 2.56 DIA. TO ALLOW FOR THE GROMMET (ITEM 1) TO SIT FLUSH ON THE SIDE OF THE DRIVER'S PLATFORM. ROUTE FAREBOX HARNESS THROUGH GROMMET (ITEM 1) THEN SEAL WITH ADHESIVE (ITEM 5) AND BUTYL TAPE (ITEM 12).
2. BUTT THE WELDED PEDESTAL ASSY (ITEM 8) TO THE LOWER DASH AND THE DRIVER'S PLATFORM. DRILL 5 HOLES AT 500 DIA IN FLOOR USING PEDESTAL (ITEM 8) AS A TEMPLATE.
3. USE FLOOR SEALANT FROM OPTION GROUP 450-XXXXX. LINE ITEM 26 TO SEAL PEDESTAL ASSY (ITEM 8) TO FLOOR. TOOL SEALANT TO CREATE A SMOOTH RADIUS AS SHOWN IN SECTION B-B. ENSURE THE GAP BETWEEN PEDESTAL AND FLOOR IS COMPLETELY FILLED.
4. USE BLACK ADHESIVE (ITEM 5) ON TWO VERTICAL EDGES AND TOP HORIZONTAL EDGES OF PEDESTAL TO SEAL PEDESTAL TO DASH PANEL AND DRIVER'S PLATFORM.

QTY	U/M	ITEM	PART NO.	DESCRIPTION	WEIGHT
5	EA	11	3500403	160 T HEX 3/8-16 X 2.25 S5	
1	EA	12	5046176	TAPE-BUTYL 100X1.0	
5	EA	11	51106000	LOCKWASHER S5 3/8 NOM.	
10	EA	10	50006000	WASHER FLAT S5 3/8 NOM.	
5	EA	9	50006000	NUT S5T 3/8 UNC	
1	EA	8	394140	ASSY-FAREBOX PEDESTAL	20.29 LBS
1	EA	7	352707	PLATE-FAREBOX PEDESTAL ACCESS	.81 LBS
10	EA	6	394146	FAREBOX HARNESS	1.81 LBS
1	EA	5	213794	SPACER-FAREBOX PEDESTAL	1.61 LBS
4	EA	4	10500010RK	INSERT-10-24 UNC-M24	
4	EA	3	10500010RK	SCREW FH CR BLK #10-24	
1	EA	2	047001	PUSHNUT INCL. LG NOM.	
1	EA	1	006569	GROMMET 2.0 X 1.18	

MATERIAL	DESCRIPTION	TITLE
N/A		INSTL-FAREBOX PEDESTAL
WEIGHT	25.46 LBS	PART N°
TREATMENT	NONE	3941.38
		SCALE 1:1:2
		SHEET 1 OF 1

DO NOT SCALE DRAWING	REVISIONS
DIMENSIONS IN 1/8"	
ANGLES IN °	
BY NAME	DATE
DRW/D.L.O. 28-JAN-10	
CHK/D 13-H 28-JAN-10	
APP'D 22-A 29-JAN-10	
REV	DESCRIPTION
1	TEW 10, P11 5090403 QTY 4AS 5
2	ITEM 31, P11 208040 26, 41AS2
	ECO
	109809

DO NOT SCALE DRAWING	REVISIONS
DIMENSIONS IN 1/8"	
ANGLES IN °	
BY NAME	DATE
DRW/D.L.O. 28-JAN-10	
CHK/D 13-H 28-JAN-10	
APP'D 22-A 29-JAN-10	
REV	DESCRIPTION
1	TEW 10, P11 5090403 QTY 4AS 5
2	ITEM 31, P11 208040 26, 41AS2
	ECO
	109809



NEW FLYER

#Option 422 | Model: Xcelsior | Length: ALL | Propulsion: ALL

ROLLER BLINDS

Product Features:

Two Roller blinds are available in the driver's area:

- Front Windshield 42.50 inches (108 cm) horizontal coverage

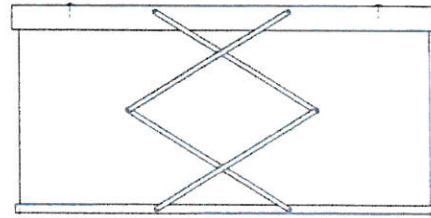


- Driver's Window 36.56 inches (93 cm) horizontal coverage

The roller blinds have been designed to effectively shade the driver from excessive light from coming into the driver's compartment.

Benefits:

- Window coverage from light filtration
- No guide required
- Easy pull down scissor design



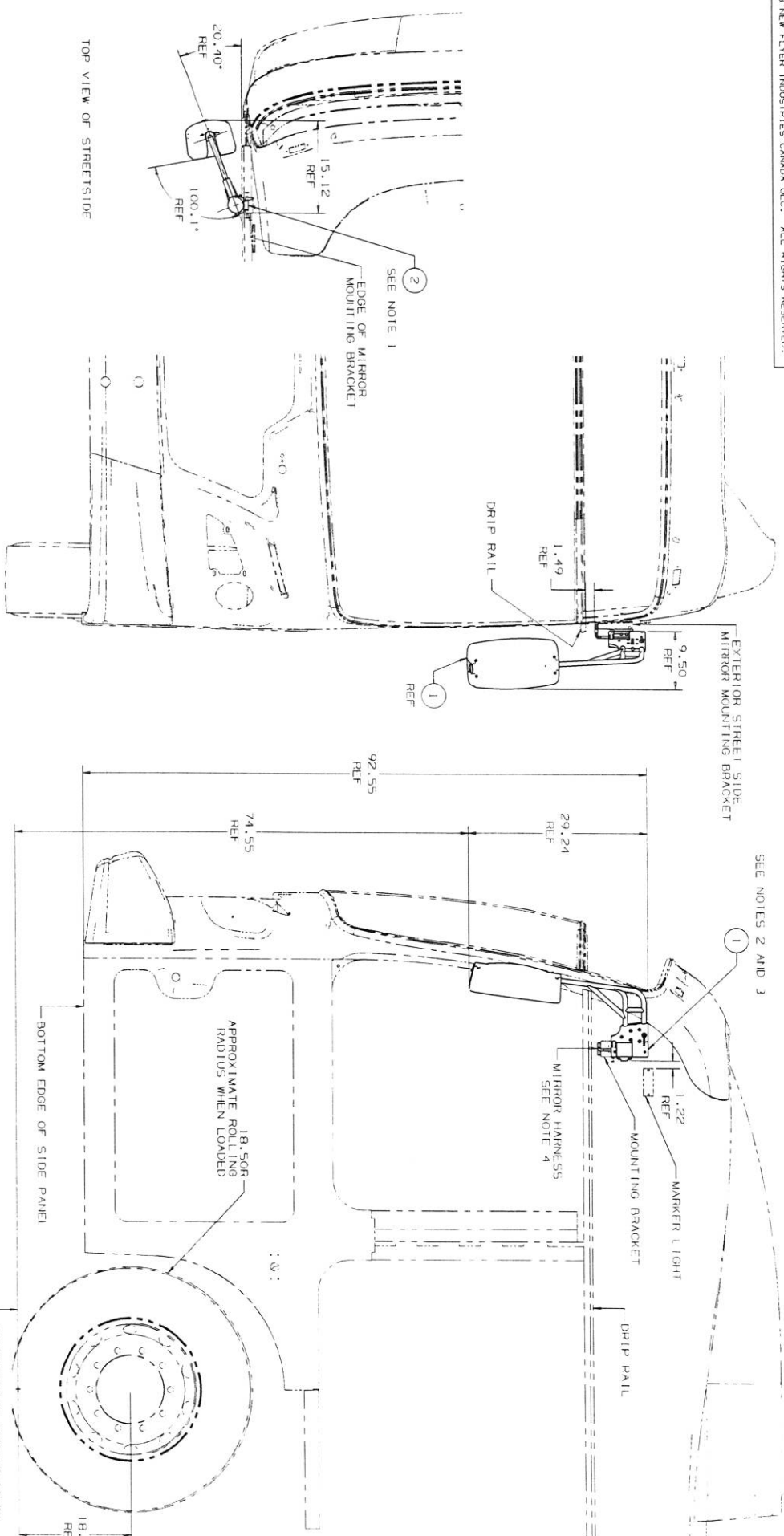
- Neutral grey color
- Maximum pull down coverage of 20 inches (51 cm)

Operation/ Procedure:

The roller blind is attached to the top frame of the windows. The blind has been equipped with a handle to allow the blind to be pulled down evenly every time.

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NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED WPP BOM SHEET FOR PARTS LISTING



NOTES:

- 1) APPLY A COATING OF LUBRICANT TO THE INSIDE SURFACES OF THE DOVETAIL GROOVE OF EXISTING MOUNTING BASE.
- 2) POSITION THE MALE DOVETAIL TONGUE OF THE MIRROR INTO THE DOVETAIL GROOVE OF THE MOUNTING BASE AND SLIDE DOWN TO THE BOTTOM OF THE GROOVE.
- 3) SECURE THE CURBSIDE MIRROR ASSEMBLY IN PLACE USING THE SET SCREWS (30 IN-LBS).
- 4) PLUG MIRROR HARNESS INTO THE FEMALE PLUG PROVIDED IN THE BOTTOM OF THE MOUNTING BASE.

DO NOT SCALE DRAWING

DIMENSIONS IN 1/8"	1
ANG IN INCH	1
THD ANGLE	30°
DRAWN BY	THOMAS LEBRIS
DATE (DD-MMM-YY)	29-JUL-13

REV	DESCRIPTION	ECO
A	RELEASED TO PRODUCTION	ECO 02/26/13

QTY	U/M	ITEM	PART NO.	WEIGHT
0.0101 EA	2	1	BILLI767	
1 EA	1	1	528680	

MATERIAL	303 STAINLESS STEEL	TITLE	INSTL-EXTERIOR MIRROR, 55
WEIGHT	1.49	SCALE	1/8" = 1"
TREATMENT	NOT REQUIRED	SCALE	1/8" = 1"
NOT REQUIRED		SCALE	1/8" = 1"

REPORT ALL ERRORS TO ENR, 887-11

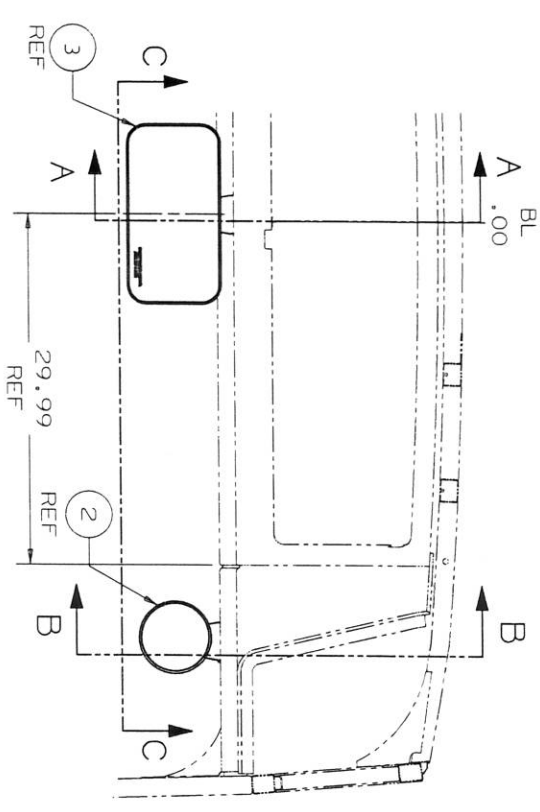
DRAWING N° 528681

PART N° 528681

SHEET 1 OF 1

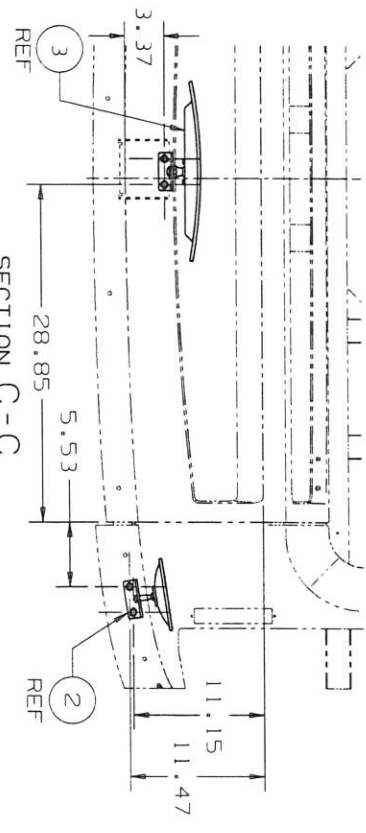
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NOTE: FOR INSTALLATION DRAWINGS PLEASE REFER TO ATTACHED MRP BOM SHEET FOR PARTS LISTING



LOOKING FORWARD AT STA 362.00

BL .00

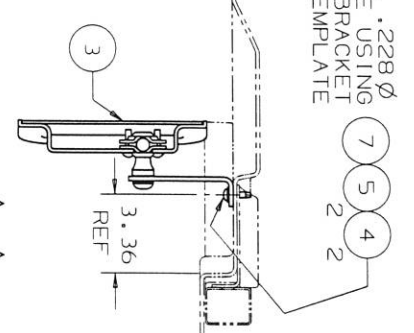


SECTION C - C

NOTES:

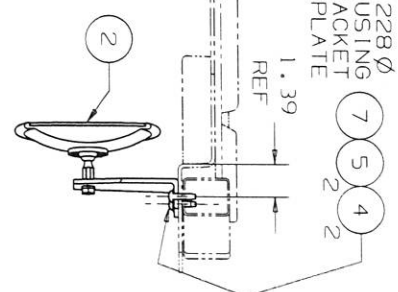
- 1) - HAND TIGHTEN SCREWS ON MIRROR ARM.
- TORQUE SCREW #1 TO 4 FT.-LBS.
- ENSURE SCREW #1 IS TORQUED BEFORE SCREW #2
- TORQUE SCREW #2 TO 4 FT.-LBS.

DRILL .228 Ø HOLE USING MIRROR BRACKET AS A TEMPLATE

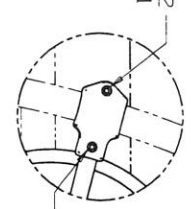


SECTION A - A
SCALE 1:4

DRILL .228 Ø HOLE USING MIRROR BRACKET AS A TEMPLATE



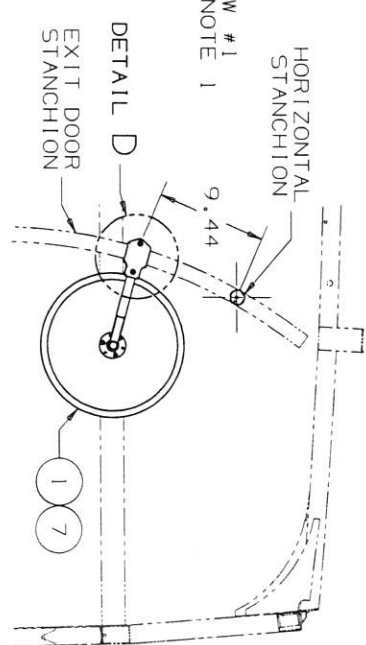
SECTION B - B
SCALE 1:4



DETAIL D
SCALE 1:4



DETAIL D
SCALE 1:4



HORIZONTAL STANCHION
LOOKING FORWARD AT STA 644.00

QTY	U/M	ITEM	PART NO.	DESCRIPTION	WEIGHT
0.01	EA	7	5927494	LOCITITE - THREAD	-
4	EA	5	50W04000BK	WASHER-FLAT 1/4 BLK	-
4	EA	4	34504016BK	SCREW-PH CR BLK 1/4 20	-
1	EA	3	271960	MIRROR-INT RR VIEW,CVX	-
1	EA	2	268392	MIRROR-INTERIOR,6" FLAT	-
1	EA	1	268390	MIRROR-INTERIOR,12" CVX	-

DO NOT SCALE DRAWING	ARE IN M.M.	1
THD ANGLE	DD-MMM-YY	06-FEB-12
BY	NAME	DD-MMM-YY
DRAWN	C.S.D.	06-FEB-12
CHK'D		
APP'D		

REVISION	DESCRIPTION	DATE
1	ISSUED FOR CONSTRUCTION	06-FEB-12
2	REVISED TO REFLECT CHANGES	06-FEB-12
3	REVISED TO REFLECT CHANGES	06-FEB-12
4	REVISED TO REFLECT CHANGES	06-FEB-12
5	REVISED TO REFLECT CHANGES	06-FEB-12

SALES INFORMATION BULLETIN

#422-001 | **Model:** Xcelsior® | **Lengths:** 35', 40' and 60' | **Propulsion:** All

Secure Diagnostics Station (SDS)

Product Features

The SDS is a standard feature on all Xcelsior® models. Its streamlined design has dual functionality, providing a barrier behind the driver and offering a secure location for unique customer-specific electronics.

In the SDS sensitive electronic equipment can be mounted to easily accessible slide-out trays. The tray spacing is adjustable to account for a wide variety of custom electronics used in the transit industry. The SDS has capacity for four (4) of these trays which are 19.50" x 15.31" (495 mm x 389 mm) in size and designed to minimize vibration.

Additional features of the SDS include:

- A four (4) pocket take-one holder installed on the aisle-face-forward side of the SDS box
- A lower 1" x 18" (25 mm x 457 mm) LED strip light conveniently located 30" (762 mm) from the floor to provide aisle lighting at the front of the bus
- Quarter-turn latches to ensure security
- Space behind the driver for an optional tool/driver's storage box
- Space behind the driver for a fire extinguisher
- Racks and trays painted white to enhance visibility.

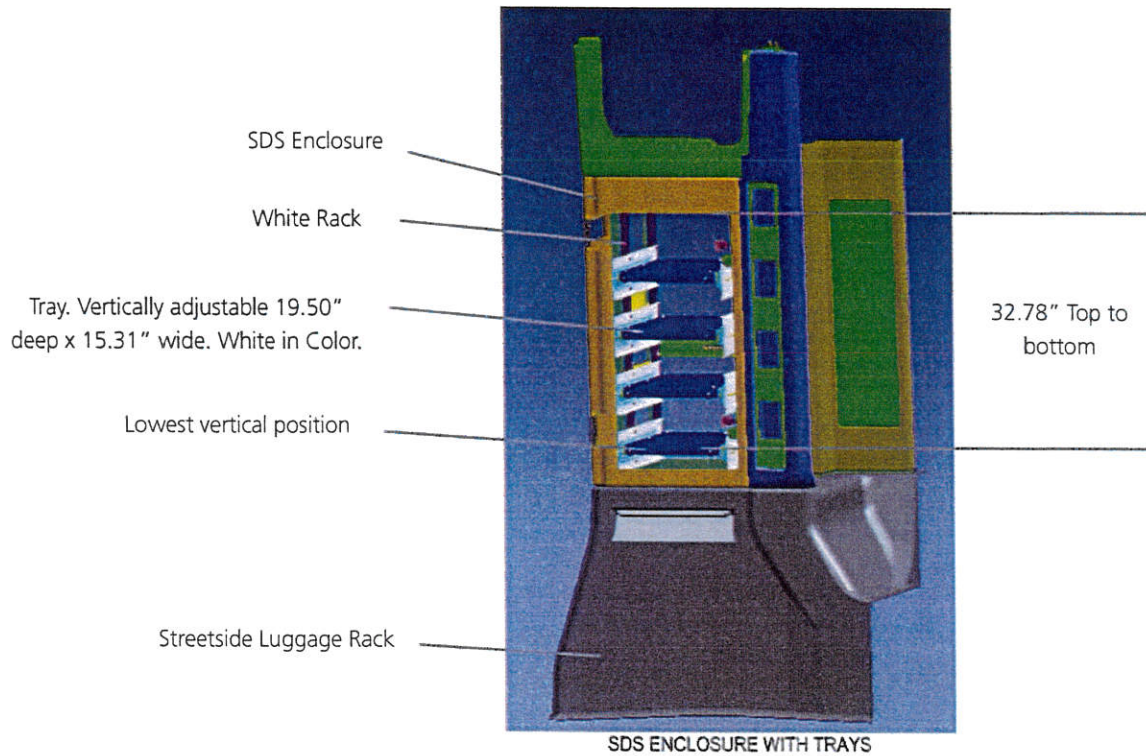
Benefits

Provides a convenient and secure location for a variety of important electronic equipment such as:

- Radio
- DVR (digital video recorder)
- AVA (automatic voice annunciation) module
- AVL (automatic vehicle location) module
- APC (automatic passenger counter) module
- Wireless network devices module
- Brake stroke monitoring module
- Diagnostic ports



SALES INFORMATION BULLETIN



Service and repair

The electronic equipment in the SDS can be easily worked on with the slide-out tray design. The egress-type window behind the SDS box also allows repairs from outside the bus. Since the SDS comes with quarter-turn key, the access to the electronic equipment within it can be controlled or restricted by maintenance personnel.