GREATER PORTLAND TRANSIT DISTRICT
Large-Sized Low Floor Transit Buses
RFP # 2022-002

ADDENDUM #3

DATE: March 7, 2022

The attention of firms submitting proposals for the work named in the above Invitation is called to the following modifications to the documents as were issued.

The items set forth herein, whether of clarification, omission, addition and/or substitution, shall be included and form a part of the bidder's submitted material and the corresponding contract and/or purchase order when executed. No claim for additional compensation, due to lack of knowledge of the contents of this Addendum will be considered.

****

ALL PROPOSERS ARE ADVISED THAT RECEIPT OF THIS NOTICE MUST BE DULY ACKNOWLEDGED, EITHER ON THE PROPOSAL FORM OR BY THE INSERTION OF THIS SHEET, SIGNED, AND SUBMITTED WITH YOUR PROPOSAL.

****

Addendum No. 3 to the GPTD **RFP #2022-002: Large-Sized Low Floor Transit Buses,** is hereby acknowledged.

COMPANY NAME: _____

SIGNED BY: _____

PRINT NAME &
TITLE _____

METRO responses to proposer questions for RFP 2022-002 "Large-Sized Low Floor Transit Buses"

Is it possible to bid for imported buses or only American made buses can be supplied?

Any bus manufacturer that meets the FTA "Buy America" requirements as stated in the RFP may submit a proposal for this procurement.

Please see attached for responses to Approved Equals Requests.

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 49 PDF Page Number 79 Attachment Yes

Specification Language
Colors will match DUPONT transit-grade white (#B8424 HN), with blue (PMS 3135) 8" stripe. Electronic pictures of our existing fleet can be forwarded to prospective bidders upon request.

Request for Approval
New Flyer requests approval to provide paint that shall be applied in accordance with New Flyer's standard Quality Assurance Paint Appearance Standards.

New Flyer advises that DuPont Performance Coatings are now Axalta Coating Systems.

This is inherent to the bus design and was provided on your previous builds.

Please see attached the **New Flyer Exterior Paint Appearance Standards**.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
Metro paint scheme has changed. See attached.

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 50 PDF Page Number 80 Attachment No

Specification Language
EXTERIOR LIGHTING
Commercially available LED (Light Emitting Diode)-type lamps shall be used wherever possible; Trucklight LED lights meet these specifications.

Request for Approval
New Flyer requests approval to provide a full LED headlight assembly manufactured by JW Speaker.

New Flyer requests approval to provide Dialight lights for the exterior lights.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

GREATER PORTLAND

metro

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number B.07 Section Title INDEMNIFICATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 2 PDF Page Number 13 Attachment No

Specification Language	**Request for Approval**
	New Flyer requests approval to revise the following language to clarify indemnity provision limiting damages to proven third party damages and the parameters which New Flyer is willing to accept, in which bold text is added language and struck text is omitted: ...against any and all **proven third party** liabilities, damages, ~~claims, demands, liens, encumbrances,~~ judgments, awards, losses, costs and expenses ~~and suits or actions or proceedings, reasonable~~ expenses, costs and **reasonable** attorneys' fees incurred by the Agency and its officers, employees and agents, including consultants, **in any successful action against the Contractor under the Contract,** in the ~~defense,~~ settlement or satisfaction thereof....negligent acts, errors or omissions of its officers, employees, servants, agents, Subcontractors and Suppliers. The obligations.... are caused ~~solely~~ by the.... or consultants **for which the GPTD will be liable on a proportionate basis to their negligent acts, errors, or omissions.**

GPTD Response:

Approved ☐ Denied ☒ Noted ☐

Comments:

GP
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number B.05 Section Title DATA RIGHTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 1 PDF Page Number 17 Attachment No

Specification Language	**Request for Approval** New Flyer requests approval to revise the following language to clarify limitations on the Agency's license to use proprietary data of New Flyer, and on its ability to reverse engineer patented parts and software, in which bold text is added language and struck text is omitted: ...License requirements... **All subject data shall remain the property of the Contractor**. Subject to applicable Maine law, GPTD shall protect...The Contractor shall grant a non-exclusive, **royalty-free, non-transferable, and irrevocable license** to allow GPTD to utilize such information **solely** in ~~order to operate...reverse engineer patented parts and software~~ **for the purpose of maintaining and operating the vehicles.** The Contractor shall grant a royalty-free, non-exclusive, **non-transferable,** and irrevocable license to allow GPTD to ~~reproduce and, publish or otherwise~~ use~~, and to authorize others to use,~~ the following subject data **solely** for ~~its purposes~~ **the purpose of maintaining and operating the vehicles**...

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number B.08 Section Title SUSPENSION OF WORK

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 3 PDF Page Number 18 Attachment No

Specification Language	**Request for Approval** New Flyer requests approval to revise the following language to add reasonableness element, in which bold text is added language and struck text is omitted: GPTDF may at any time and for any reason within its sole discretion, **acting reasonably...**

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number B.09-1 Section Title EXCUSEABLE DELAYS/FORCE MAJEURE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 4 PDF Page Number 19 Attachment No

Specification Language	**Request for Approval** New Flyer requests approval to revise the following language to clarify parameters of Force Majeure provision, including delay for COVID-19 pandemic related causes, in which bold text is added language and struck text is omitted: ... 1. The cause of.... or embargo; **or loss of transportation; or pandemic or epidemic;** then the time for completion of the work and/or the delivery dates shall be extended by GPTD by a reasonable period of time after such event of delay has ended in order that the Contractor may complete the work or deliver the buses. **For certainty, the Contractor shall not be liable for failure to perform any of its obligations under the Contractor during any period in which the Contractor cannot perform due to the impact of the COVID-19 pandemic on its operations, provided that the Contractor promptly notifies GPTD in writing of such issues. The Contractor and GPTD shall work together in a good faith and commercially reasonable manner in an attempt to modify the required obligations if necessary.**

GPTD Response:

Approved ☐ Denied ☒ Noted ☐

Comments:
Pandemic, epidemic and loss of transportation delays are included, provided all other criteria in Section 9 are met.

GF
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II IV Section Number C.13 4 Section Title INTERCHANGEABILITY

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 12 PDF Page Number 0 Attachment No

Specification Language
All Buses and components delivered under this Contract, whether provided by a Subcontractor or Supplier, or manufactured by the Contractor, shall be duplicates in design and manufacture, and installed to assure interchangeability among Buses and components in each separate order. This interchangeability shall extend to the Buses and components and parts as well as to their locations in the Buses for all Buses produced during the first year of the Contract.

Request for Approval
New Flyer requests approval to provide buses manufactured within a given production run to be duplicates in design. However, since this request for proposal includes options for additional coaches, interchangeability cannot be guaranteed between option orders. For example, the engine manufacturer might change emission components in order to meet regulatory requirements that might change.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number C.04 Section Title ASSUMPTION OF RISK OF LOSS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 11 PDF Page Number 27 Attachment No

Specification Language

Request for Approval
New Flyer requests approval to revise the following language to clarify that the transfer or risk occures upon delivery (removed and "acceptance" to avoid confusion with acceptance of bus provisions), in which bold text is added language and struck text is omitted:

...loss of each Bus upon acceptance of delivery. Prior to delivery ~~and acceptance~~ the Contractor shall...

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number C.01 Section Title ...AVAILABILITY OF FUNDS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 9 PDF Page Number 26 Attachment No

Specification Language	**Request for Approval**
	New Flyer requests approval to revise the following language to clarify payments owed to New Flyer in the event of termination due to lack of funding, in which bold text is added language and struck text is omitted: The period of performance shall be three (3) years. GPTD's obligations under this Contract are contingent upon the availability of Federal, State, and/or local funds. GPTD reserves the right to withdraw its award of this Contract to the Contractor in the event that GPTD is unable to secure Federal, State, and/or local funding for the BASE order. In the unlikely event that any of GPTD's Federal, State, and/or local funding for the BASE order is withdrawn, reduced, or limited in any manner prior to GPTD's placement of said purchase order, GPTD reserves the right to withdraw its award of this Contract to the Contractor. Funding for the OPTIONAL order is subject to the future securement of federal and local funding. **For certainty, in the event of lack of funding after award, the Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination.**

GPTD Response:

Approved ☐ Denied ☒ Noted ☐

Comments:
No guarantee of payment until funding has been secured, at which time Metro will issue Purchase Order guaranteeing payment.

Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part	II	Section Number	C.03	Section Title	DELIVERY
	II		C.18		TRAINING

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

AE Number 10 PDF Page Number 0 Attachment No

Specification Language

The Contractor shall provide a vehicle orientation with each vehicle delivered to GPTD. If GPTD orders more than one vehicle of identical specifications, the orientation shall be provided on the first vehicle delivered. The orientation shall be conducted by the Contractor for GPTD's maintenance operations supervisory and training personnel.

All costs that are incidental to the initial training shall be included in the cost of the coach.

Request for Approval

New Flyer requests approval that all training be priced separately from the bus price. This will ensure proper costing regardless of the number of buses in the base order, and each subsequent option order.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number B.12 Section Title CHANGES OF LAW/PRICE ADJUSTMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 6 PDF Page Number 22 Attachment No

Specification Language	**Request for Approval** New Flyer requests approval to revise the following language to add element of good faith, in which bold text is added language and struck text is omitted: ...and the contractor, **on a good faith basis,** according to the GPTD's...

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/2/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number B.10-5 Section Title TERMINATION FOR CONVENIENCE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 5 PDF Page Number 20 Attachment No

Specification Language	**Request for Approval** New Flyer requests approval to revise the following language to ensure New Flyer is paid to date of termination, in which bold text is added language and struck text is omitted: ... 5. settle all....final for all the purposes of this clause. **The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination.**

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GA
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II **Section Number** B.15 **Section Title** MAINTENANCE OF RECORDS; ACCESS BY AGENCY; RIGHT TO AUDIT RECORDS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 7 PDF Page Number 24 Attachment No

Specification Language

Request for Approval
New Flyer requests approval to revise the following language to clarify that the confidentiality agreement in section II.B.16 also applies to the government audits, a term of 3-years was added to set a parameter to which this open-ended right of access/audit applies, in which bold text is added language and struck text is omitted:

...provisions specified elsewhere in the Contract Documents, **and shall extend for three years after completion of the contract. The confidentiality agreement as set forth in section 16 below will apply to any audit, review or analysis in order to protect and maintain the confidentiality of the Contractor's information.**

GPTD Response:

Approved ☐ **Denied** ☒ **Noted** ☐

Comments:
Confidentiality is adequately covered in Section 16

Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II **Section Number** B.16 **Section Title** CONFIDENTIAL INFORMATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 8 **PDF Page Number** 24 **Attachment** No

Specification Language	**Request for Approval** New Flyer requests approval to revise the following language to add proven and reasonable element to defence costs for which New Flyer is liable, in which bold text is added language and struck text is omitted: ... ...Contractor shall indemnify **GPTD's proven and reasonable defence costs...**

GPTD Response:

Approved ☒ **Denied** ☐ **Noted** ☐

Comments:

GF
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part	IV	Section Number	01	Section Title	DEFINITIONS
	IV		06		DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

AE Number 14 PDF Page Number 0 Attachment No

Specification Language

12. Heavy Heavy-Duty Diesel Engine (HHDD). Heavy heavy-duty diesel engines have sleeved cylinder liners, are designed for multiple rebuilds, and a rated horsepower that generally exceeds 250.

ENGINE
The HHDD engine shall be designed to operate for not less than 300,000 miles without major failure or significant deterioration... The Cummins ISL meets these requirements.

Request for Approval

New Flyer requests approval to provide Cummins L9 2021 emissions-standard diesel engine, 280 horsepower with 925 LB FT torque and EPA/Engine Model Year. This engine uses a heat exchanger for the isolated cabin heating loop. Note that the engine is classified as Heavy-Duty Engine (HDD) and is delivered without double sleeved cylinder.

This is inherent to the bus design and is same as provided on previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part II Section Number C.16 Section Title ACCEPTANCE OF EQUIPMENT

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 13 PDF Page Number 30 Attachment No

Specification Language

Request for Approval
New Flyer requests approval to revise the following language to clarify the parameters for when acceptance of the vehicle has occurred, in which bold text is added language and struck text is omitted:

...under the GPTD's acceptance tests. The acceptance tests to be conducted by the GPTD and the standards in respect of such tests shall be agreed upon by the GPTD and the Contractor prior to the Contractor building the equipment. If the equipment passes these tests...met by the Contractor, **or if the GPTD does not notify the Contractor of non-acceptance within 25 calendar days after delivery of the equipment,** acceptance of the equipment by the GPTD **shall be deemed to have occurred** on the twenty...

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GA
Signature of GPTD Official

3/7/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 40 Section Title SCOPE OF WARRANTY PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 97 PDF Page Number 111 Attachment No

Specification Language	**Request for Approval**
Warranty on new components that have replaced fleet defect components will be equal to the warranty that was originally provided on the defective components.	New Flyer request approval to provide that when a fleet defect is declared, the remaining warranty period on that item/component is suspended. The warranty period does not resume until the Fleet Defect is corrected.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

Voith Turbo
Voith Turbo Inc.
25 Winship Road
York, PA 17406, USA
Tel 717-767-3200
Fax 717-767-3210
www.usa.voithturbo.com

Here are the performance curves for New Flyer XD35 GPTD. I have included a table on this sheet, which will summarize the performance of these buses.

The simulations were based on the following parameters:

- Vehicle weight: GVWR: 36500lbs
- Engine: Cummins L9 280HP EPA 2021
- Auxiliary consumers: 50HP/163Nm on engine
- Transmission: D864.6 F4VT2R2
- Rear axle ratio: 4.56
- Tires: 305/70 R22.5 / Dynamic radius 0.485 m

	Vehicle Performance						
	Gradeability		Acceleration				Top Speed
Simulation:	2.5%	16%	0 - 10 mph	0 - 20 mph	0 - 30 mph	0 - 40 mph	70 [mph]
	40 [mph]	7 [mph]	5.0 [s]	10.8 [s]	20.0 [s]	31 [s]	
V00474.01.001	55	9	2.1	6.3	13.3	22.3	65

Please remember that all acceleration times are calculated from a stall start, not an idle start. For idle start times you typically add 1.5~2.5 sec to the stall start times to compensate for engine run-up.

The performance information above is based on given vehicle data. Voith offers no guaranties as to actual vehicle performance. This will vary due to component influences and characteristics, which are beyond our control.

If you require any more information or if you have any questions, please let me know.

Best regards / Freundliche Grüße / Atenciosamente

Washington Moura
Application Engineer
Washington.Moura@voith.com
Tel +1 717 767 3008
Mobile +1 717 659 0225

New Flyer D 35 LF Citybus

VOITH

V00474.01.001 ***Test* / Versuch**

Vehicle / Fahrzeug
- **New Flyer D 35 LF Citybus**
- *Vehicle weight* / Fahrzeuggewicht: **16.56 [t]**
- *Top speed* / Endgeschwindigkeit: **103.7 [km/h]** (64.4 [mph])

Engine / Motor
- **Cummins L9 280** 209,0 kW / 1900 (1900/1900) 1/min [1/min]
- EPA 2021 1254 [Nm]

Auxiliary consumers / Nebenverbraucher: **1**
- Nebenverbraucher **163.0 [Nm]** am Motor

Primary gearbox / Vorschaltgetriebe
- *No input-side gearbox* / kein Vorschaltgetriebe

Transmission / Getriebe
- VOITH **D 864.6 Diff.4**

Starting element / Anfahrelement
- VOITH **DIWA.6 Diff.4V**
- *Type: hydrodynamic, Maximum traction force* / Art: hydrodynamisch, Festbremspunkt: **1619 [U/min] / 1068 [Nm]**
- *Max. traction force without auxiliary consumers* / Festbremspunkt ohne Nebenverbraucher: **1697 [U/min] / 1173 [Nm]**

Braking element / Bremselement
- VOITH **1800Nm 300kW 1500Nm T2R2**
- *ECE 13* / **TÜV-Punkt: 149.3 [%]**
- *ECE 13 converter power at braking* / TÜV-Punkt Wandlerleistung beim Bremsen: **71.9 [kW]** (96.4 [h.p.])
- *ECE 13 engine* / TÜV-Punkt Motor: **1018.0 [U/min] bei 56.0 [Nm]**

Final drive gearbox / Nachschaltgetriebe
- *no final drive gearbox* / kein Nachschaltgetriebe

Axle / Achse
- *Ratio* / Uebersetzung: **4.560**

Tyres / Reifen
- **305/70 R 22.5** r_{dyn}: **0.485 [m]** (1.591 [ft])
- *Rolling resistance coefficient* / Rollwiderstandsbeiwert: 0.0070

Shifting programme / Schaltprogramm
- **BASP** *automatic generated* / automatisch generiert

Driver / Fahrer
- **Testfahrer 100 %** *driver* / **Fahrer**
- *Operation: full load, experience: excellent* / Fahrweise: Vollast, Erfahrung: sehr groß

New Flyer D 35 LF Citybus

VOITH

Tractive force diagram / Zugkraftdiagramm — Section: 2 Page: 2

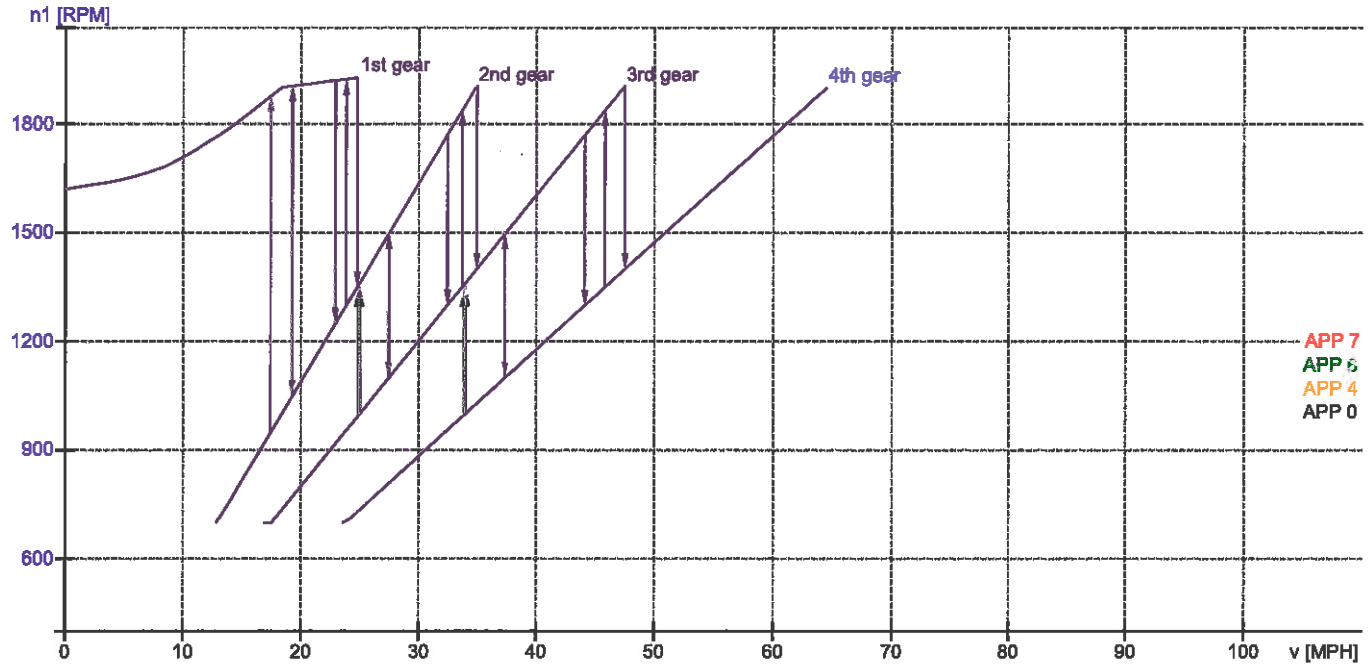
V00474.01.001 ***Test*** / **Versuch**

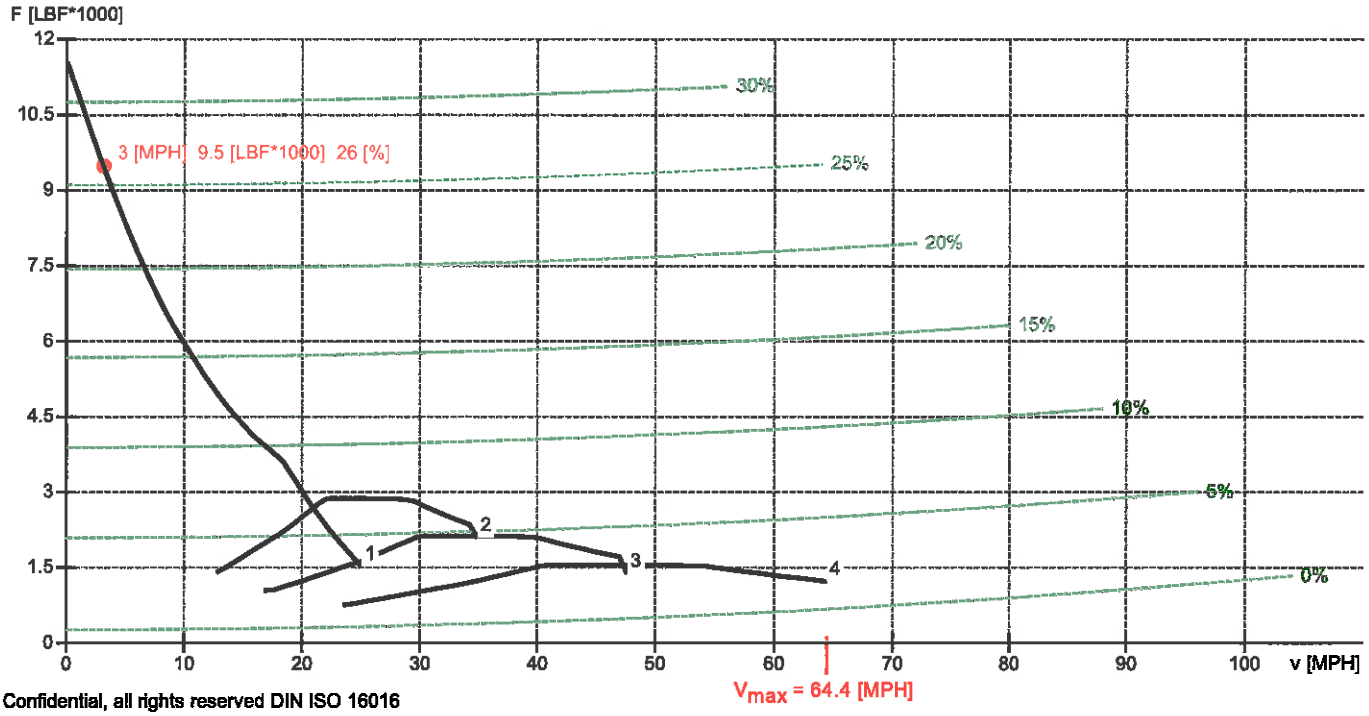
Vehicle / Fahrzeug: **New Flyer D 35 LF Citybus**
r_{dyn} = 19.094 [IN] f_R = 0.007 i_A = 4.560
CW = 0.450 A = 82.426 [SQFT] m = 36.51 [LB*1000] V_{max} = 64.4 [MPH]

Engine / Motor: **Cummins L9 280**
280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

Transmission / Getriebe: **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
i_{1max} = 5.400 i_2 = 1.361 i_3 = 1.000 i_4 = 0.735

Shiftprogram / Schaltprogramm: SP4





***Vehicle* / Fahrzeug:** **New Flyer D 35 LF Citybus**
r_{dyn} = 19.094 [IN] f_R = 0.007 i_A = 4.560
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***Engine* / Motor:** **Cummins L9 280**
280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

***Transmission* / Getriebe:** **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
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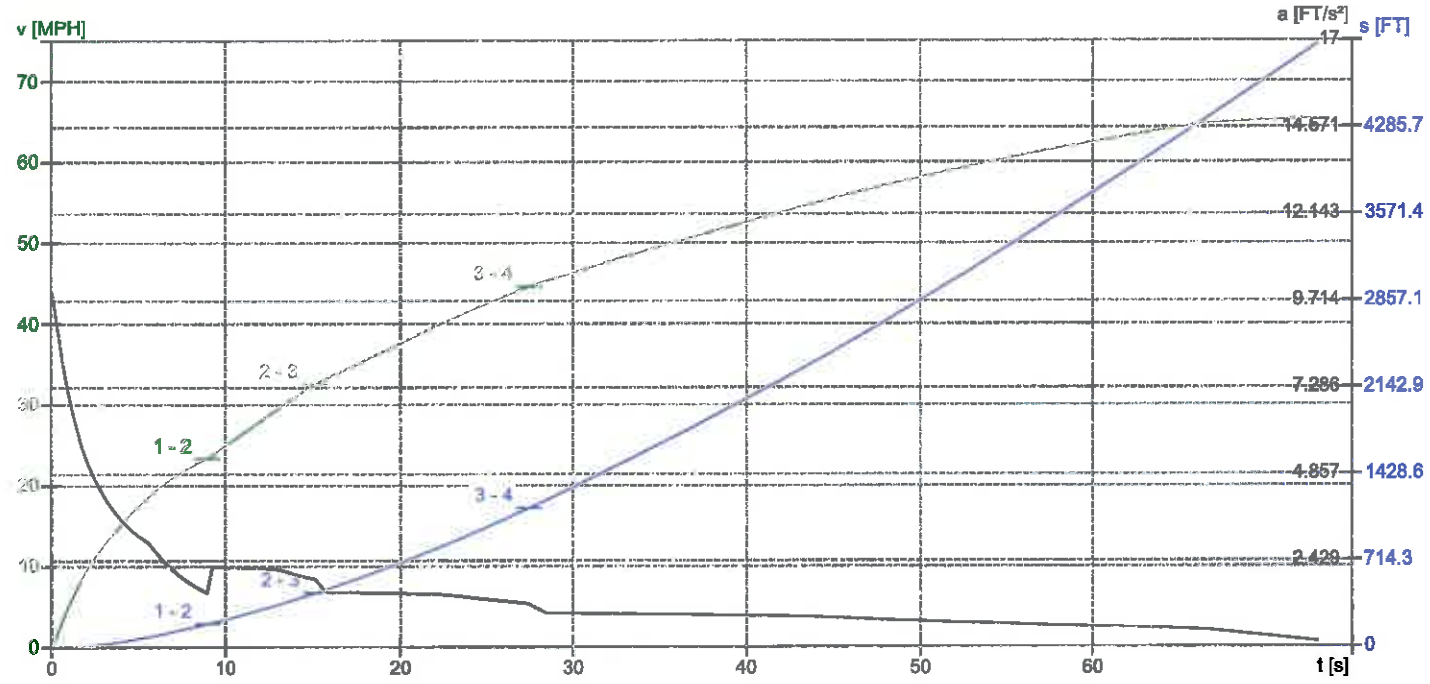

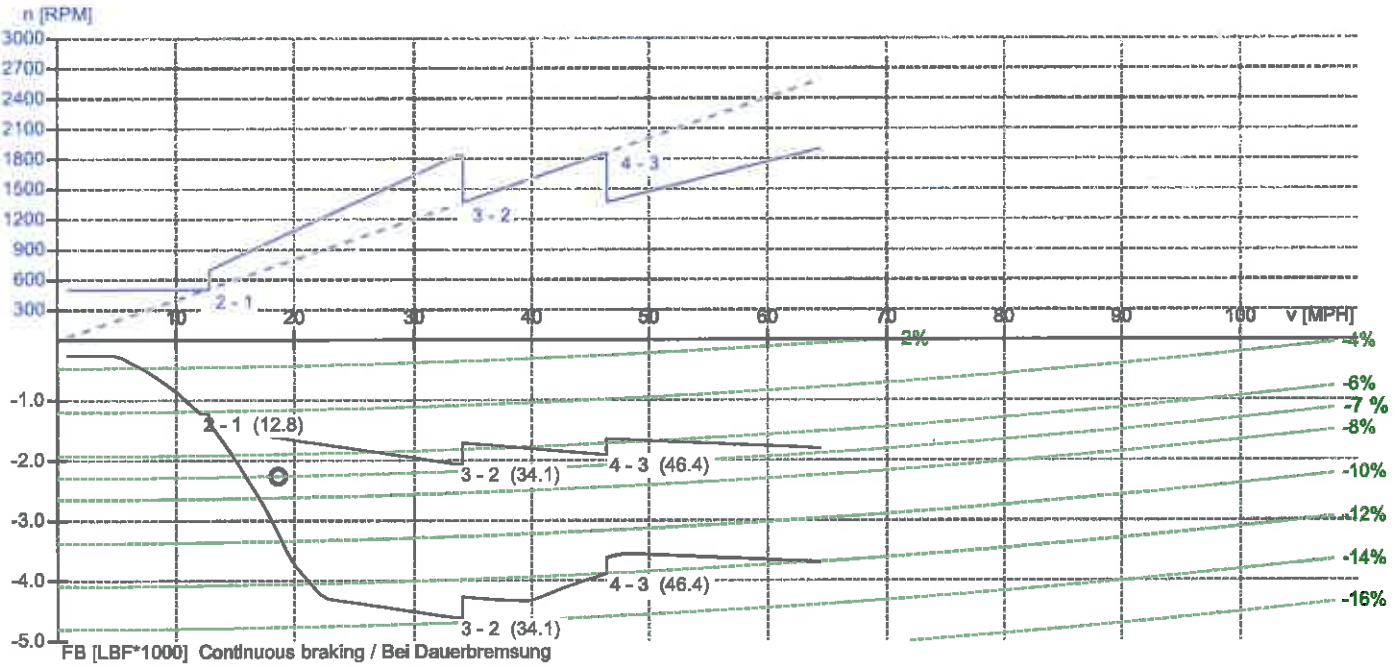

Vehicle / Fahrzeug: **New Flyer D 35 LF Citybus**
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280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

Transmission / Getriebe: **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
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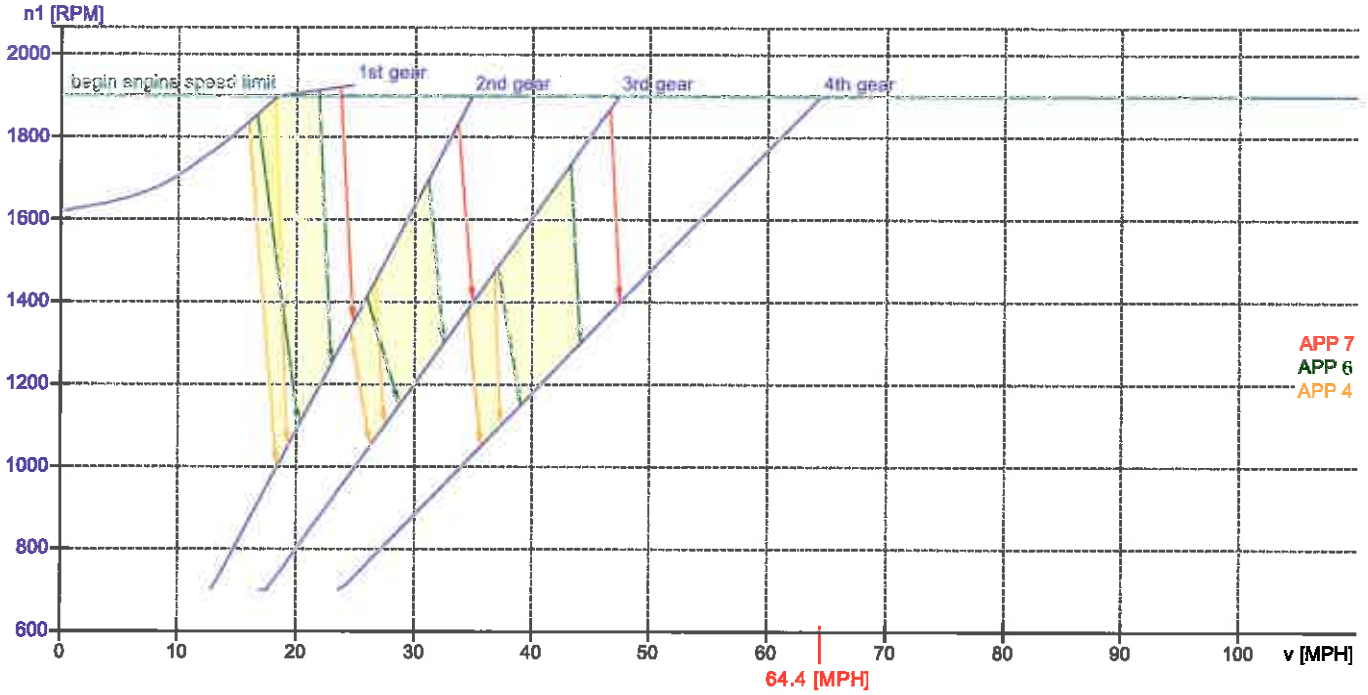
Shiftprogram / Schaltprogramm: SP4



	---------aMax--------		---------aMin--------	
	n1[RPM] from-to	v[MPH] from-to	n1[RPM] from-to	v[MPH] from-to
Upshift 1-2				
APP4	1837-1000	15.8-18.3	1895-1049	18.1-19.2
APP6	1856-1100	16.6-20.1	1915-1249	21.8-22.9
APP7			1922-1350	23.6-24.7
Upshift 2-3				
APP4	1337-1051	24.5-26.2	1452-1100	26.6-27.4
APP6	1413-1150	25.9-28.6	1699-1300	31.1-32.4
APP7			1834-1400	33.6-34.9
Upshift 3-4				
APP4	1382-1050	34.4-35.6	1475-1100	36.7-37.3
APP6	1486-1150	37.0-39.0	1735-1300	43.2-44.1
APP7			1871-1400	46.6-47.5

APP* = Accelerator Pedal Position

***Vehicle* / Fahrzeug:** **New Flyer D 35 LF Citybus**
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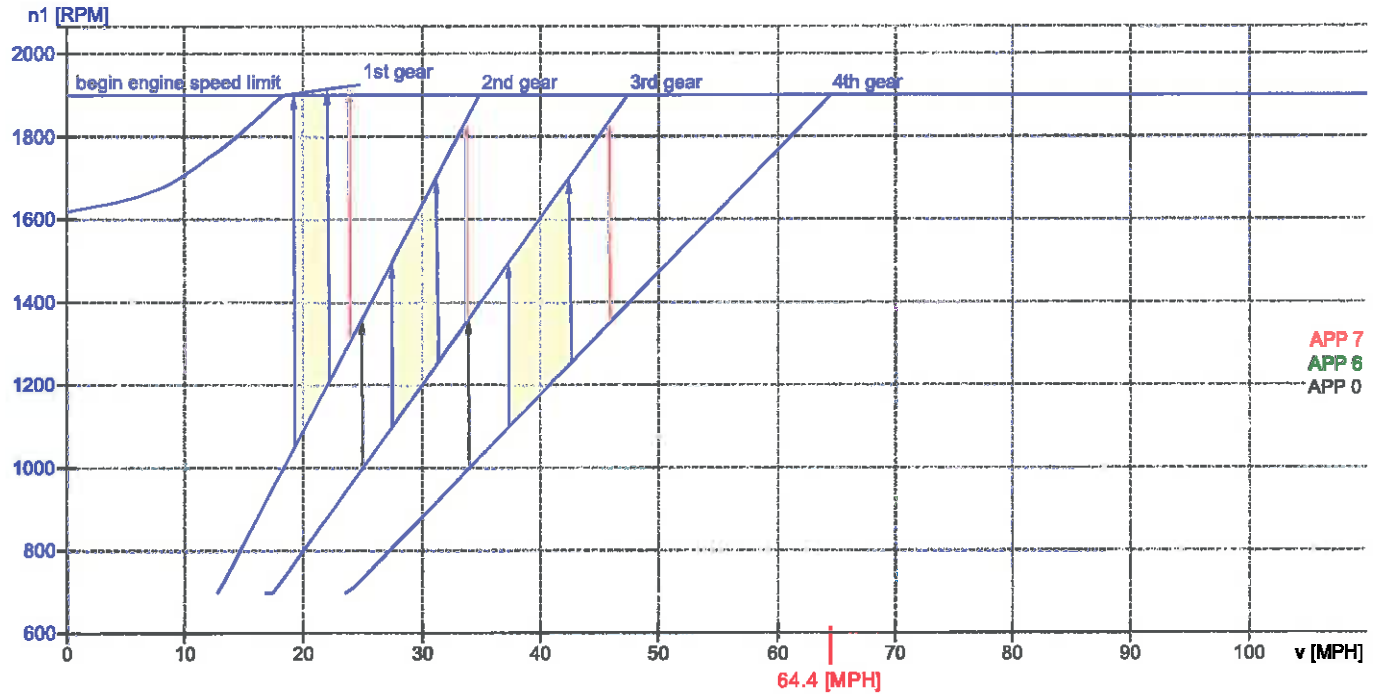
280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

***Transmission* / Getriebe:** **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
i_{1max} = 5.400 i_2 = 1.361 i_3 = 1.000 i_4 = 0.735

***Shiftprogram* / Schaltprogramm:** SP4



	---------aMin--------		---------aMax--------	
	n1[RPM] from-to	v[MPH] from-to	n1[RPM] from-to	v[MPH] from-to
Downshift 2-1				
APP0	0-0	0.0-0.0		
APP6	1053-1904	19.3-19.2	1213-1916	22.2-22.0
APP7	1303-1923	23.9-23.8		
Downshift 3-2				
APP0	1003-1361	25.0-24.9		
APP6	1103-1497	27.5-27.4	1259-1701	31.4-31.1
APP7	1353-1837	33.7-33.6		
Downshift 4-3				
APP0	1002-1361	34.0-33.9		
APP6	1102-1497	37.3-37.3	1257-1700	42.6-42.4
APP7	1352-1837	45.8-45.8		

APP* = Accelerator Pedal Position

V00474.01.001 *Test* / Versuch

Vehicle / Fahrzeug: **New Flyer D 35 LF Citybus**
r_{dyn} = 19.094 [IN] f_R = 0.007 i_A = 4.560
CW = 0.450 A = 82.426 [SQFT] m = 36.51 [LB*1000] V_{max} = 64.4 [MPH]

Engine / Motor: **Cummins L9 280**
280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

Transmission / Getriebe: **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
i_{1max} = 5.400 i_2 = 1.361 i_3 = 1.000 i_4 = 0.735

Shiftprogram / Schaltprogramm: SP4

Time Fahrzeit t[s]	Vehicle accel. Fahrz.-beschl. a[FT/s²]	Vehicle speed Fahrg. v[MPH]	Distance Wegstrecke s[FT]	Gear Gang [-]	Tractive force Zugkraft F[LBF*1000]	Engine speed Drehz Motor n1[RPM]	Engine torque Drehm Motor M1[LBFT]	Engine power Leistung Motor PM1[HP]	Load step Last-stufe [-]
0.01	9.96	0.05	0.0	1	11.56	1620.2	908.0	280.09	7
0.02	9.92	0.12	0.0	1	11.51	1620.5	907.8	280.07	7
0.03	9.88	0.18	0.0	1	11.47	1620.9	907.6	280.10	7
0.08	9.84	0.52	0.0	1	11.43	1621.2	907.4	280.08	7
0.17	9.47	1.14	0.1	1	11.00	1624.8	905.5	280.11	7
0.27	9.09	1.77	0.4	1	10.57	1628.3	903.5	280.09	7
0.40	8.72	2.49	0.7	1	10.15	1631.9	901.6	280.12	7
0.53	8.25	3.24	1.3	1	9.61	1635.8	899.5	280.12	7
0.66	7.87	3.92	2.0	1	9.19	1639.3	897.6	280.14	7
0.79	7.50	4.59	2.8	1	8.77	1643.4	895.3	280.13	7
0.92	7.17	5.26	3.8	1	8.40	1648.1	892.7	280.12	7
1.07	6.84	5.93	4.9	1	8.03	1653.3	889.9	280.10	7
1.22	6.52	6.60	6.3	1	7.66	1659.2	886.7	280.10	7
1.38	6.22	7.27	7.9	1	7.32	1665.9	883.0	280.06	7
1.54	5.92	7.94	9.8	1	6.98	1673.3	879.0	280.03	7
1.72	5.63	8.61	11.9	1	6.65	1680.7	875.0	279.97	7
1.90	5.38	9.28	14.3	1	6.37	1690.9	869.4	279.87	7
2.09	5.14	9.95	17.0	1	6.10	1702.1	863.4	279.79	7
2.29	4.92	10.63	20.0	1	5.85	1715.0	857.3	279.91	7
2.50	4.70	11.30	23.4	1	5.60	1727.5	851.2	279.96	7
2.72	4.49	11.97	27.1	1	5.36	1741.5	844.5	280.00	7
2.95	4.29	12.64	31.3	1	5.13	1755.7	837.7	280.02	7
3.19	4.08	13.31	35.9	1	4.91	1768.6	831.5	279.99	7
3.44	3.90	13.98	40.9	1	4.70	1783.4	824.4	279.93	7
3.71	3.74	14.65	46.4	1	4.52	1798.7	817.1	279.80	7
3.98	3.59	15.32	52.5	1	4.35	1816.1	809.6	279.93	7
4.27	3.43	16.00	59.1	1	4.18	1832.3	802.7	280.01	7
4.57	3.30	16.67	66.2	1	4.02	1849.2	795.4	280.02	7
4.88	3.18	17.34	73.9	1	3.89	1867.3	787.7	280.04	7
5.20	3.06	18.01	82.3	1	3.76	1883.8	780.6	279.97	7
5.53	2.93	18.68	91.3	1	3.62	1900.6	768.5	278.07	7
5.89	2.72	19.35	101.4	1	3.38	1903.3	743.4	269.37	7
6.29	2.50	20.02	112.8	1	3.13	1906.0	717.6	260.39	7
6.72	2.28	20.69	125.6	1	2.89	1908.8	691.8	251.39	7
7.19	2.08	21.36	140.2	1	2.66	1911.6	665.8	242.31	7
7.72	1.89	22.04	156.8	1	2.44	1914.4	640.1	233.28	7
8.29	1.71	22.71	175.8	1	2.24	1917.1	614.7	224.35	7
8.93	1.54	23.38	197.4	1	2.05	1919.9	589.2	215.38	7
9.22	2.26	23.83	207.4	2	2.87	1283.1	924.9	225.94	7
9.66	2.25	24.50	222.9	2	2.87	1319.8	924.9	232.40	7
10.10	2.25	25.17	238.8	2	2.87	1356.5	924.9	238.86	7
10.53	2.25	25.84	255.2	2	2.87	1393.1	924.9	245.31	7
10.97	2.24	26.51	272.1	2	2.87	1429.8	924.9	251.77	7
11.41	2.24	27.18	289.4	2	2.87	1466.4	924.9	258.22	7
11.85	2.23	27.85	307.2	2	2.87	1503.1	924.8	264.64	7
12.30	2.22	28.52	325.5	2	2.86	1539.8	922.5	270.45	7
12.74	2.21	29.19	344.3	2	2.85	1576.4	920.4	276.23	7
13.19	2.18	29.87	363.9	2	2.82	1613.1	911.8	280.04	7
13.66	2.11	30.54	384.6	2	2.74	1649.7	891.9	280.11	7

V00474.01.001 *Test* / Versuch

Vehicle / Fahrzeug: **New Flyer D 35 LF Citybus**
r_{dyn} = 19.094 [IN] f_R = 0.007 i_A = 4.560
CW = 0.450 A = 82.426 [SQFT] m = 36.51 [LB*1000] V_{max} = 64.4 [MPH]

Engine / Motor: **Cummins L9 280**
280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

Transmission / Getriebe: **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
i_{1max} = 5.400 i_2 = 1.361 i_3 = 1.000 i_4 = 0.735

Shiftprogram / Schaltprogramm: SP4

Time Fahrzeit t[s]	Vehicle accel. Fahrz.-beschl. a[FT/s²]	Vehicle speed Fahrg. v[MPH]	Distance Wegstrecke s[FT]	Gear Gang [-]	Tractive force Zugkraft F[LBF*1000]	Engine speed Drehz Motor n1[RPM]	Engine torque Drehm Motor M1[LBFT]	Engine power Leistung Motor PM1[HP]	Load step Last-stufe [-]
14.14	2.04	31.21	406.4	2	2.67	1686.4	871.9	279.93	7
14.64	1.98	31.88	429.5	2	2.60	1723.1	853.4	279.95	7
15.16	1.92	32.55	453.7	2	2.54	1759.7	835.8	280.01	7
15.79	1.55	33.22	484.3	3	2.12	1319.9	924.9	232.42	7
16.43	1.55	33.89	515.7	3	2.12	1346.8	924.9	237.16	7
17.06	1.54	34.56	547.7	3	2.12	1373.8	924.9	241.91	7
17.70	1.54	35.23	580.4	3	2.12	1400.7	924.9	246.65	7
18.35	1.53	35.91	613.9	3	2.12	1427.6	924.9	251.38	7
18.99	1.53	36.58	648.1	3	2.12	1454.6	924.9	256.14	7
19.64	1.52	37.25	683.1	3	2.12	1481.5	924.9	260.87	7
20.28	1.52	37.92	718.8	3	2.12	1508.5	924.4	265.48	7
20.94	1.51	38.59	755.4	3	2.12	1535.4	922.8	269.76	7
21.59	1.50	39.26	792.9	3	2.11	1562.3	921.2	274.01	7
22.25	1.49	39.93	831.2	3	2.11	1589.3	919.7	278.27	7
22.92	1.46	40.60	870.9	3	2.08	1616.2	910.2	280.05	7
23.62	1.42	41.27	912.4	3	2.04	1643.1	895.5	280.12	7
24.33	1.38	41.95	955.9	3	2.00	1670.1	880.7	280.04	7
25.06	1.34	42.62	1001.4	3	1.96	1697.0	866.0	279.81	7
25.82	1.30	43.29	1049.0	3	1.92	1723.9	852.9	279.93	7
26.59	1.27	43.96	1098.6	3	1.89	1750.9	840.0	280.01	7
27.39	1.23	44.63	1150.5	3	1.85	1777.8	827.1	279.95	7
28.42	0.96	45.30	1218.1	4	1.55	1326.5	924.9	233.58	7
29.45	0.95	45.97	1287.1	4	1.55	1346.3	924.9	237.07	7
30.48	0.95	46.64	1357.5	4	1.55	1366.1	924.9	240.55	7
31.53	0.94	47.31	1429.4	4	1.55	1385.9	924.9	244.04	7
32.58	0.94	47.99	1502.7	4	1.55	1405.7	924.9	247.53	7
33.63	0.93	48.66	1577.5	4	1.55	1425.5	924.9	251.01	7
34.70	0.93	49.33	1654.0	4	1.55	1445.3	924.9	254.50	7
35.77	0.92	50.00	1732.0	4	1.55	1465.1	924.9	257.99	7
36.85	0.91	50.67	1811.7	4	1.55	1484.9	924.9	261.47	7
37.93	0.90	51.34	1893.0	4	1.54	1504.7	924.6	264.88	7
39.03	0.90	52.01	1976.3	4	1.54	1524.5	923.4	268.02	7
40.14	0.89	52.68	2061.4	4	1.54	1544.3	922.3	271.17	7
41.26	0.88	53.35	2148.6	4	1.53	1564.1	921.1	274.30	7
42.39	0.87	54.03	2237.7	4	1.53	1583.9	920.0	277.42	7
43.54	0.86	54.70	2329.3	4	1.52	1603.7	917.0	279.98	7
44.73	0.83	55.37	2424.8	4	1.50	1623.5	906.2	280.09	7
45.95	0.81	56.04	2524.7	4	1.48	1643.3	895.4	280.14	7
47.21	0.78	56.71	2629.1	4	1.46	1663.1	884.6	280.08	7
48.52	0.75	57.38	2738.3	4	1.44	1682.9	873.8	279.96	7
49.87	0.73	58.05	2852.6	4	1.42	1702.7	863.2	279.81	7
51.26	0.70	58.72	2972.2	4	1.40	1722.5	853.7	279.95	7
52.71	0.68	59.39	3097.5	4	1.38	1742.3	844.1	280.01	7
54.21	0.66	60.07	3228.8	4	1.36	1762.1	834.7	280.02	7
55.77	0.63	60.74	3366.7	4	1.34	1781.9	825.2	279.94	7
57.38	0.61	61.41	3511.6	4	1.32	1801.7	815.7	279.81	7
59.06	0.59	62.08	3663.8	4	1.30	1821.5	807.3	279.97	7
60.81	0.56	62.75	3823.8	4	1.28	1841.2	798.9	280.03	7
62.63	0.54	63.42	3992.4	4	1.27	1861.0	790.4	280.03	7

Vehicle / Fahrzeug: **New Flyer D 35 LF Citybus**
r_{dyn} = 19.094 [IN] f_R = 0.007 i_A = 4.560
CW = 0.450 A = 82.426 [SQFT] m = 36.51 [LB*1000] V_{max} = 64.4 [MPH]

Engine / Motor: **Cummins L9 280**
280 [HP] (1900 [RPM]) 925 [LBFT] (1200-1590 [RPM]) EPA 2021

Transmission / Getriebe: **D 864.6 Diff.4V DIWA.6 T2R2 1800Nm 300kW 1500Nm**
i_{1max} = 5.400 i_2 = 1.361 i_3 = 1.000 i_4 = 0.735

Shiftprogram / Schaltprogramm: SP4

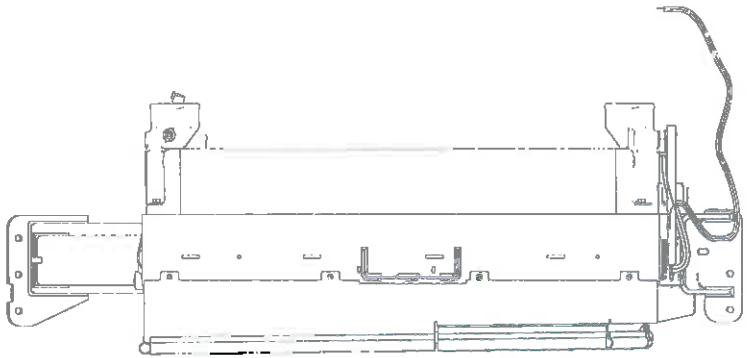
Time Fahrzeit t[s]	Vehicle accel. Fahrz.-beschl. a[FT/s²]	Vehicle speed Fahrg. v[MPH]	Distance Wegstrecke s[FT]	Gear Gang [-]	Tractive force Zugkraft F[LBF*1000]	Engine speed Drehz Motor n1[RPM]	Engine torque Drehm Motor M1[LBFT]	Engine power Leistung Motor PM1[HP]	Load step Last-stufe [-]
64.54	0.52	64.09	4170.1	4	1.25	1880.8	781.9	279.98	7
66.57	0.48	64.76	4362.1	4	1.22	1900.6	767.7	277.80	7
72.95	0.15	65.43	4971.8	4	0.85	1920.4	583.9	213.47	7

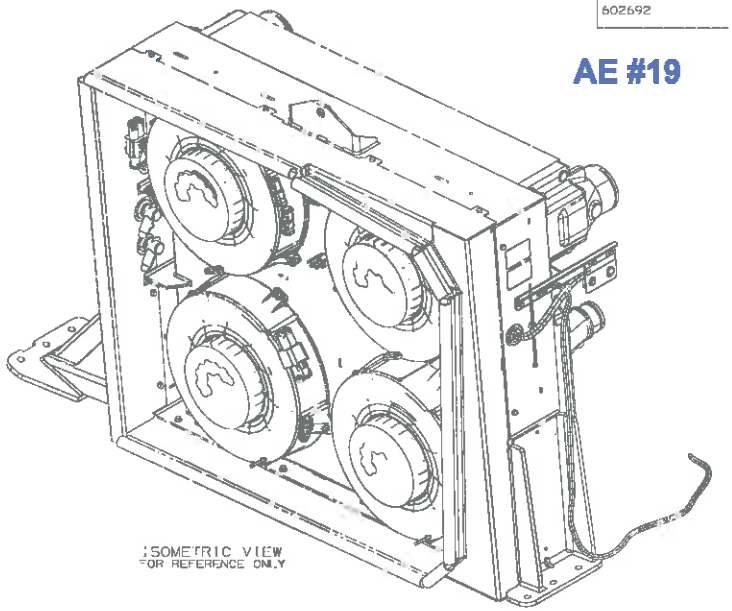
DDITIONAL INFORMATION CAN BE OBTAINED BY REFERENCING THEIR DIMENSIONAL
EIGN DATA. CONTACT YOUR NEW FLYER REPRESENTATIVE AS REQUIRED.

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

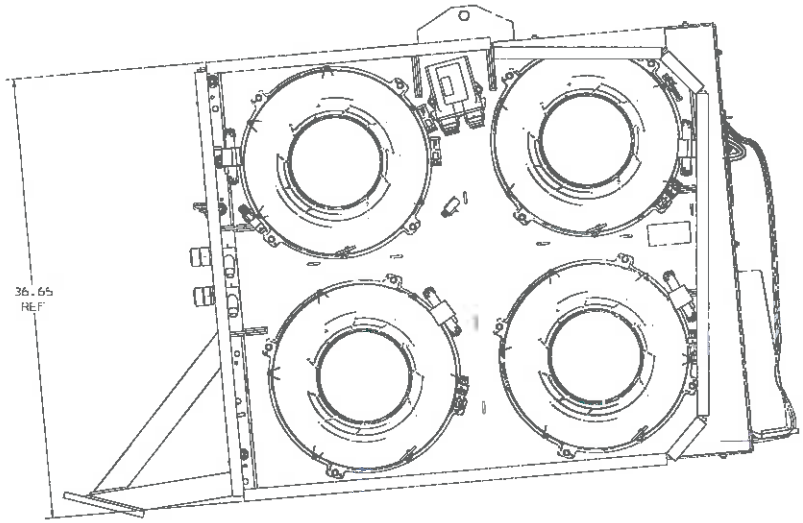
DRAWING Nº
602692

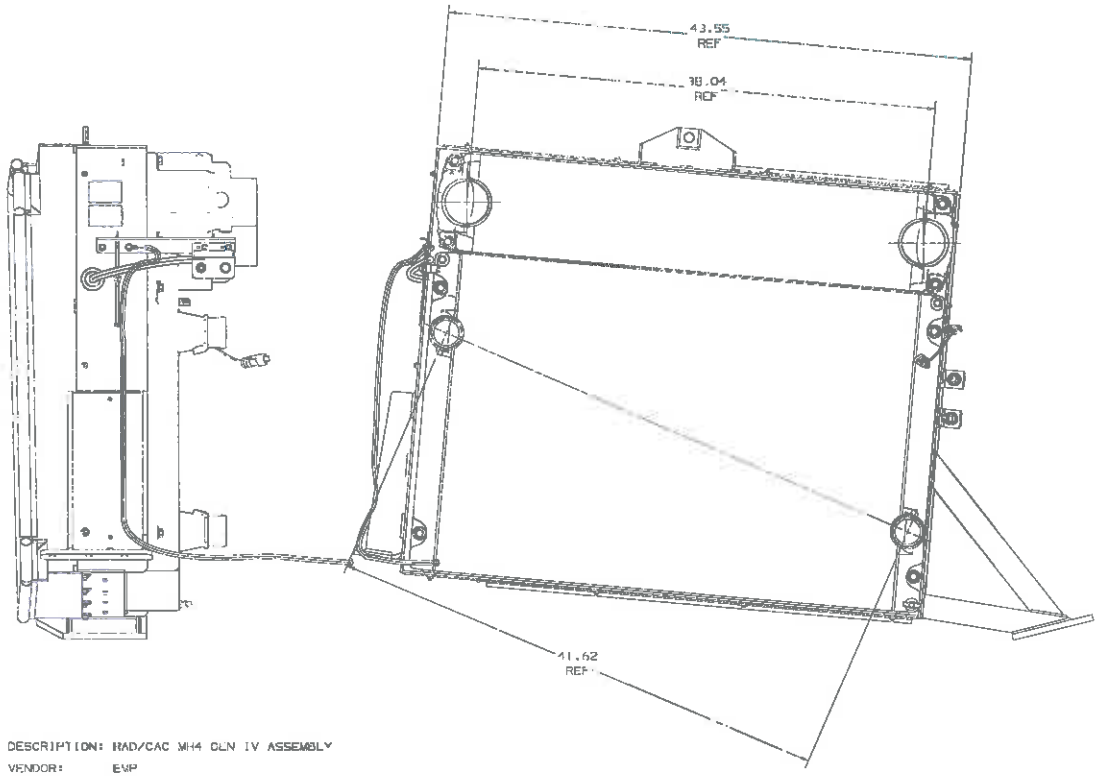
AE #19





ISOMETRIC VIEW
FOR REFERENCE ONLY





NOTE: BRAZING FLUX POTASSIUM ALUMINUM FLUORIDE
IS NOT TO BE USED IN THE CONSTRUCTION
OF THE CHARGE AIR COOLER.

DESCRIPTION: RAD/CAC MH4 GEN IV ASSEMBLY
VENDOR: EMP
VENDOR P/N: 202008000

2 NOT SCALE DRAWING
IMENSIONS IN [ ] ARE IN MM.
ID ANGLE
DRAWN BY
EDWIN HERNANDEZ
DATE (DD-MMM-YY)

C	HARNESS REMOVED FROM REFERENCE MODEL.	ECN-074630

MATERIAL N/A	UNSPEC'D TOLS. .X ±.12 .XX ±.05 .XXX ±.02 HOLE DIA. ±.015 BEND RADII ±.03 ANGLE TOL. ±1°	DEC. INC.	TITLE ASSY-RAD/CAC EMP MH4 GEN IV
WEIGHT TBD			PART Nº 602692
TREATMENT BLACK POWDERCOAT	SIMILAR TO 678716		NEW FLYER

DDITIONAL INFORMATION CAN BE OBTAINED BY REFERENCING THREE DIMENSIONAL
ESIGN DATA. CONTACT YOUR NEW FLYER REPRESENTATIVE AS REQUIRED.

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

DRAWING N°
602692

MH4 4GX4336DG XCELSIOR (2 CORE): PRODUCT SPECIFICATION SHEET

FEATURE	DESCRIPTION/SPECIFICATION
AMBIENT OPERATION TEMP RANGE	-40F TO 120F (-40C TO 46C) FULL LOAD
AMBIENT STORAGE TEMP RANGE	-40F TO 221F (-40C TO 105C)
RADIATOR DESIGN	CAST AL TANKS, AL BAR-PLATE WITH 8.5 FPI WAVY FIN & 50 HOT ROW CORE
CENTER CORE (OIL/WATER)	N/A
CAC DESIGN	CAST AL TANKS , AL BAR-PLATE WITH 8.5 FPI WAVY FIN & 16 HOT ROW CORE
FAN DRIVE SYSTEM	4 EMP FIL-15 15" DIAMETER ELECTRIC FANS
FAN FLOW DIRECTION	PUSHER
COOLING FAN SPEED	VARIABLE SPEED 0-4350 RPM
FAN CONTROL SYSTEM	ELECTRONIC FEEDBACK CONTROL
FAN FAIL-SAFE	FAN ON AT DEFAULT SPEED @ 3300 RPM
CURRENT DRAW (28 VDC)	228 AMPS MAX
REVERSIBLE FANS/DEBRIS REMOVAL	PUSHBUTTON OPERATION / OPTIONAL SAE J1939 DM7 MESSAGE
CURBSIDE QUIET MODE	AUTOMATIC VIA SAE J1939 CCVS MESSAGE
CAN COMMUNICATION	STANDARD SAE J1939 PROTOCOL
SYSTEM DIAGNOSTIC REPORTING	SAE J1939 DM1 MESSAGE
SYS DIAGNOSTICS TROUBLESHOOTING	LAPTOP SERVICE TOOLS VIA SAE J1939 DIAGNOSTICS PORT
SYSTEM FAULT INDICATOR	FLASHING LED CODES
SOFTWARE/CALIE S	LAPTOP SERVICE TOOLS VIA SAE J1939 DIAGNOSTICS PORT
CONTROL PARAMETERS	J1939 ENGINE COOLANT AND INTAKE MANIFOLD TEMPERATURES. OPTIONAL: TRANS FAN REQUEST
CALIBRATIONS BASED ON ENGINE MODEL	PROGRAMMABLE FAN ACTIVATION TEMPERATURE AND FULL COOLING COMMAND BASED ON COOLANT AND CHARGE AIR TEMPERATURE. OPTIONAL: TRANS FAN REQUEST
FAN CONTROL STRATEGIES	INDEPENDENT CHARGE AIR AND COOLANT TEMPERATURE CONTROL PER HEAT EXCHANGER. OPTIONAL: MINIMUM FAN SPEEDS FOR ENGINE COMPARTMENT CIRCULATION, AFTER ENGINE WARM UP
GROUND CABLE	50" GROUND CABLE ATTACHED TO RAD

NOT SCALE DRAWING
IMENSIONS IN [ ]
E IN mm.
D ANGLE
DRAWN BY
EDRIN HERNANDEZ
DATE 100-MMM-YY1
C SEE SHEET 1
EDN-074630

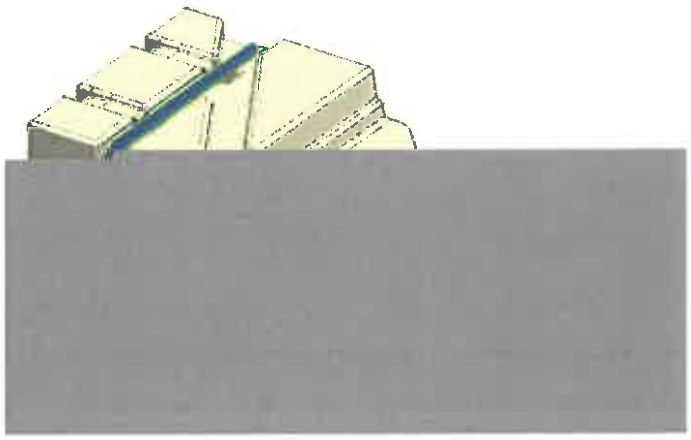
MATERIAL N/A
WEIGHT TBD
TREATMENT BLACK POWDERCOAT
UNSPECIFIED TOLS. .XXX IN.
.X ±.12
.XX ±.05
.XXX ±.02
HOLE DIA. ±.015
BEND RADII ±.03
ANGLE TOL. ±1°
SIMILAR TO 579716
TITLE
ASSY-RAD/CAC EMP MH4 GEN IV
NEW FLYER
PART N°
602692

Polyethylene Diesel Fuel Tank

Product Features

The fuel system includes:

- Single cross-linked polyethylene fuel tank
- Fuel lines and check valve
- Fuel filters
- Fuel pump
- Fuel filler



Fuel Tank

A single fuel tank is mounted transversely in the vehicle chassis, forward of the rear axle. A fuel filler neck assembly is bolted to the tank and provides mounting locations for the fuel-filler adapter, pressure relief valve, and fuel-level control valve. Fuel tank fill access is provided through a hinged door on the curbside of the vehicle. Supply and return fuel hoses connect the fuel tank with the engine.

The tank is constructed of cross-linked polyethylene with a nominal thickness of 0.300". The tank is internally baffled to prevent fuel sloshing regardless of fill level.

- The polyethylene diesel fuel tank comes in the standard size of 144 US gallons (545 L).
- All lengths of diesel buses allow up to either 100 or 125 usable US Gal (378 L /473 L).
- All lengths of diesel-hybrid buses allow up either 100 or 125 usable US Gal (378 L /473 L).

The fuel tank assembly is securely mounted to the bus with two support channels on both sides and a tubular structure in the center. The fuel tank is mounted to the support channels by means of straps to prevent movement. The lightweight design of the tank and the design of the tank supports make the tank easy to remove for maintenance.

ERROR: undefined
OFFENDING COMMAND: ec

STACK:

-savelevel-

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 39 Section Title FLEET DEFECTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 96 PDF Page Number 110 Attachment No

Specification Language
A fleet defect is defined as the failure of identical parts from identical causes, covered by the warranty and occurring in the warranty period in a proportion of the buses delivered under this contract. For deliveries of 9 buses and under, the fleet defect proportion shall be 50%.

Request for Approval
New Flyer is committed to ensuring that you get the most value from your vehicles and is requesting approval on fleet defect coverage for the limited base bus warranty period of 1 year/50,000 miles (whichever occurs first) and applies to orders or options of 12 or more units.

Please note: Fleet Defect does not apply major components (engine, transmission, and HVAC). Major component manufacturers will not recognize and/or participate in fleet defect clauses, however, if the fleet defect percentage is reached in a major component, New Flyer will fully support and assist you with obtaining a remedy from the major component manufacturer.

GPTD Response:

Approved ☐ Denied ☒ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title WARRANTY REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 95 PDF Page Number 109 Attachment Yes

Specification Language	**Request for Approval**
Specific subsystems and components are warranted and guaranteed to perform and be free from defects for the following times or miles, whichever occurs first, given in Table 3-1.	New Flyer request approval to provide a 5 years / 300,000 mile MAN Axle limited warranty. The warranty covers components only as specified by the manufacturer's warranty document.
Drive Axle - 2 years / 100,000 miles, 100% Parts and Labor	Please see attached **MAN warranty document** for terms and conditons.

GPTD Response:

Approved ☐ Denied ☐ Noted ☑

Comments:
Warranty requirement is as stated in RFP. Manufacturers may offer additional warranty.

CE

Signature of GPTD Official

3/3/22

Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 27 Section Title BATTERIES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 90 PDF Page Number 107 Attachment No

Specification Language
Battery terminals shall be located for access in less than 30 seconds with jumper cables.

Request for Approval
New Flyer requests approval to provide a jumpstart connector as opposed to jumper cables (without a connector).

Jumpstarting the batteries using a jumpstart connector is more convenient and more importantly, it eliminates the chance of hooking up the jumpstart cable in the wrong battery terminal.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 27 Section Title BATTERIES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 89 PDF Page Number 107 Attachment No

Specification Language
The battery terminal ends and cables shall be color-coded with red for the primary positive, black for negative, and another color for any intermediate voltage cables.

Request for Approval
New Flyer requests approval to color-code the cable ends as opposed to providing a full-colored cables. Please note that the cables are also labelled with wire-code to avoid incorrect installation along with electrical diagram (attached on the battery compartment door) as a reference for cable-reinstallation.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 28 Section Title MASTER BATTERY SWITCH

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 91 PDF Page Number 107 Attachment No

Specification Language
A lockable master switch on the battery positive (+) shall be provided in the battery compartment near the batteries for complete disconnecting from all bus electrical systems.

Request for Approval
New Flyer requests approval to provide a master battery disconnect switch mounted on the fusebox (located above the battery compartment).

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 31 Section Title DIGITAL VIDEO RECORDING SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 92 PDF Page Number 108 Attachment No

Specification Language	**Request for Approval**
The DVR must record 8 channels of audio and video.	New Flyer requests clarification on if QTY 8 x cameras are required for the camera system.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
8 cameras are required (6 interior, 2 exterior)

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title WARRANTY REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 93 PDF Page Number 109 Attachment No

Specification Language
The Contractor's warranty service representative will be the single contact for all warranty issues related to any component or subcomponent on the bus. For example, if a component or subcomponent fails during the warranty period (i.e., engine), the District will contact the Contractor, who will then ensure an appropriate and timely response from that component or subcomponent manufacturer. This requirement must be identified in the Contractor's written warranty policy submittal (see Warranty Provisions, Section 34).

Request for Approval
It is New Flyer's priority to ensure that all warranty-covered repairs are completed by the appropriate party in order for you to receive the highest quality, least expensive and most efficient outcome possible. With this goal in mind, New Flyer requests approval on the following solutions:

1. Minor/Major Warranty-covered repairs should be carried out by the property and reimbursed by the contractor through iWarranty. New Flyer is available to assist in completing these warranty-covered repairs when it is beyond the property's scope of expertise.

2. Major Component Warranty repairs should be carried out by the equipment suppliers (engine, transmission, HVAC and destination sign suppliers) in order to adhere to their mandate that all warranty repairs be performed by an authorized dealer unless the property is an authorized warranty center. If the property elects to perform these repairs, without the written permission of the original equipment manufacturer, the remaining warranty coverage may be voided.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GE

Signature of GPTD Official

3/3/22

Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title WARRANTY REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 94 PDF Page Number 109 Attachment No

Specification Language	**Request for Approval**
Warranty will also pay for road calls (bus change out) that are caused by equipment breakdown that are covered by warranty.	Due to the unpredictable nature of Road Calls and difficulty in predicting the cost impact during the bid stage, New Flyer requests approval to follow the industry-standard and to not provide reimbursement for Roadcalls and Troubleshooting items.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 20 Section Title SIGNAGE AND COMMUNICATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 79 PDF Page Number 103 Attachment No

Specification Language
The message shall be visible to the seated driver and seated passengers.

Request for Approval
New Flyer requests approval to mount the interior sign on the HVAC enclosure where it can be viewed by all seated passengers. Please note this location is not visible to the seated operator. However, we provide dash indicators dedicated for the seated operator to notify whether a regular stop or wheelchair stop has been requested.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 21 Section Title ELECTRICAL SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 80 PDF Page Number 105 Attachment No

Specification Language	**Request for Approval**
Fuses shall be used only where it can be demonstrated that circuit breakers are not practicable, and they shall be easily accessible for replacement.	New Flyer requests approval to use high current fuses for circuits with current requirements of 80 amps or higher. These would be the main power distribution circuits that originate in the fuse box and distribute power throughout the coach. Fuses are used for these circuits to emphasize a severe problem in the circuit that requires immediate action and it cannot be delayed by simply resetting with a circuit breaker. This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 23 Section Title WIRING AND TERMINALS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 82 PDF Page Number 105 Attachment No

Specification Language
Wiring harnesses shall not contain wires of different voltages unless all wires within the harness are sized to carry the current and insulated for the highest voltage wire in the harness.

Request for Approval
New Flyer requests approval to provide harnesses which are separated based on their functionality as opposed to their voltages. Each wire color provided will identify the voltage it carries such as red wire for 24V and blue wire for 12V.

Doing this will eliminate the creation of unnecessary addition of harnesses that will stress the wire duct and possibly, affect the air flow.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 23 Section Title WIRING AND TERMINALS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 81 PDF Page Number 105 Attachment No

Specification Language
Except as interrupted by the master battery disconnect switch, battery and starter wiring shall be continuous cables, grouped, numbered, and/or color-coded with connections secured by bolted terminals; and shall conform to specification requirements of SAE Standard J1127-Type SGT or SGX and SAE Recommended Practice J541.

Request for Approval
New Flyer requests approval to provide continous cables between the battery and starter but it is interrupted by the master battery switch and the fusebox's busbar (located near the engine compartment and battery compartment).

We provide this design to minimize the amount of electrical connections that would be stacked on the 24V load side of the master battery switch.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GA
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 23 Section Title WIRING AND TERMINALS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 83 PDF Page Number 105 Attachment No

Specification Language
Double insulation shall be maintained as close to the terminals as possible.

Request for Approval
New Flyer request approval to use double insulation on all wiring except for wiring that is within an electrical panel. These panels would be the side console, rear panel, fuse box, switch box, exit door panels and SDS panel.

Listed below are the reasons why New Flyer does not provide double insulation for wiring within the electrical panels:

- Clamps and tie wraps are strategically positioned which minimizes harness movement and the opportunity for harness chaffing

- All sharp edges near the harness routing is covered with a protective rubber channel eliminating the possibility of the wiring insulation getting damaged

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 23 Section Title WIRING AND TERMINALS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 84 PDF Page Number 105 Attachment No

Specification Language
All wiring harnesses over 5 feet long and containing at least 5 wires shall include 10 percent excess wires for spares that are the same size as the largest wire in the harness excluding the battery cables.

Request for Approval
New Flyer requests approval to provide spare wires but they are not going to be the same size as the largest wire in the harness. The size of wiring we provide as spares will be dependent on:

- The max wire gauge that a Specific component at the location where these spares are routed will accept.
- The max wire gauge that the component connector(s) will accept at the final destination of the routed spares.

Please note that spare wires are installed only between major electrical distribution panel's ibn the vehicle. Installation of spare wires in all harness locations can lead to wire chaffing and kinking.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 26 Section Title MULTIPLEX WIRING SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 86 PDF Page Number 106 Attachment No

Specification Language
Wiring used for the multiplexing shall be stamped with the address of the corresponding I/O location.

Request for Approval
New Flyer requests approval to stamp our wirings with wire code as opposed the address of its I/O location. Please note that the wires are stamped with wire code at 3-inches interval along the whole length of the wire.

Doing this allows the customer to change the input/output location of the wire without replacing the entire wire due to incorrect I/O address.

Please note that we also provide an electrical decal for wire code identification.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 24 Section Title JUNCTION BOXES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 85 PDF Page Number 106 Attachment No

Specification Language	**Request for Approval**
The boxes shall be sealed to prevent moisture from normal sources, including engine compartment cleaning, from reaching the electrical components and shall prevent fire that may occur inside the box from propagating outside the box.	New Flyer requests approval to provide sealed junction boxes only in areas where there is high-moisture. These would be the junction boxes located in the exterior of the bus. However, junction boxes that are located in the interior of the bus are not sealed simply because they are not exposed to moisture. Instead, they are designed to be water and dust resistant and accessible only to maintenance personnel.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 27 Section Title BATTERIES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 88 PDF Page Number 107 Attachment Yes

Specification Language
The batteries shall be securely mounted on a stainless steel tray that can accommodate the size and weight of the batteries.

Request for Approval
New Flyer requests approval to provide a polyethylene battery tray supported by a stainless steel sub-frame.

This design is corrosion resistant, light weight and has proven to be extremely robust.

Please note that the batteries are supported by structural stainless steel U-channels sized to support two (2) 8D batteries or up to four (4) Group-31 batteries.

Please see attached **SIB 260-001 Battery System** for more information.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 26 Section Title MULTIPLEX WIRING SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 87 PDF Page Number 107 Attachment No

Specification Language	**Request for Approval**
The system shall be hosted on an IBM-compatible personal computer as well as a hand held field diagnostic unit capable of reading the network data, control function and address data, or function code.	New Flyer requests approval to provide a multiplex system that is accessed with a laptop but not with a hand held field diagnostic unit. Please note that a hand-held device for Vansco Multiplex sytem is not available. This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 65 PDF Page Number 90 Attachment No

Specification Language	**Request for Approval**
Dimensions Each door opening clear width shall be no less than 30 inches with the doors fully opened. When open, the doors shall leave an opening no less than 84.5 inches in height. Allowable projection into the door opening is shown on the figure "Transit Coach Minimum Door Opening."	New Flyer requests approval to provide the following dimensions for the entrance door: Entrance Door Clear Width between door handles: 33.8 inches Entrance Door Clear Width between door panels: 36.8 inches Entrance Door Height: 77.3" (1963.5 mm)

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 66 PDF Page Number 90 Attachment No

Specification Language	**Request for Approval**
Door Glazing The upper section of both front and rear doors shall be glazed for no less than 45 percent of the respective door opening area of each section. The lower section of the front door shall be glazed for no less than 25 percent of the door opening area of the section.	New Flyer requests approval to provide a front door that is a full one-piece design glazing on each panel, which provides the driver with an improved viewing area. New Flyer has standardized on the Ameriview panels to maximize the driver's visibility from the seated position. This is inherent to the bus design and was provided on your previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 67 PDF Page Number 92 Attachment Yes

Specification Language
Deployment or storage of the ramp shall require no more than 5 seconds. The time required to perform other phases of the loading or unloading operation shall not exceed 15 seconds.

The Lift U ramp model#LU11-08-05 meets these requirements.

Request for Approval
New Flyer requests approval to provide New Flyer's patented self contained, modular flip type ramp that is stored in a stainless steel box mounted into the floor of the bus. The non-skid, 3/16 inch thick aluminum ramp platform has a clear width of 32.25 inches, a length of 47.6 inches and is rated at 660 lbs (aprox 300 kg) with a deployment angle ratio of 1:7. The ramp exceeds ADA requirements.

The New Flyer ramp has a deployment or storage time that is 10 seconds, same as your previous build SR-2492

Please see attached **SIB 580-001 Wheelchair Ramp New Flyer** for additional information.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 68 PDF Page Number 91 Attachment No

Specification Language	**Request for Approval**
A four-way switch conveniently located in the driver's compartment shall control all movements of the passenger doors.	New Flyer requests approval to provide a 5-position door controller located on the driver's side console. The 5-positions are as follows: Position #1 (CLOSED): Entrance door closed; exit door disabled. Position #2 (FRONT): Entrance door open; exit door disabled. Position #3 (FRONT REAR): Entrance door open; exit door enabled. Position #4 (REAR): Entrance door closed; exit door enabled. Position #5 (REAR FRONT): Entrance door open; exit door enabled. This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GE
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 69 PDF Page Number 96 Attachment No

Specification Language	**Request for Approval**
WINDSHIELD WIPERS No part of the windshield wiper mechanism shall be damaged by manual manipulation of the arms.	New Flyer requests approval to remove this requirement. The electric wiper may sustain damage to motor gears or linkage if the wiper arms are manually manipulated.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 70 PDF Page Number 98 Attachment No

Specification Language
Exterior Mirrors
Mirror mounting brackets shall be break-away style to minimize damage to the mirror and mirror housing in the event of a mirror stike.

Request for Approval
New Flyer requests approval to provide a spring-back mirror function. Break away mirrors have an inherent safety risk of injury if a mirror was to fall from a bus. Spring back mirrors will deflect and return to original position.

New Flyer does not offer a breakaway mirror mounting system.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 72 PDF Page Number 96 Attachment Yes

Specification Language
Space shall be provided on the panel for future additions of no less than 5 indicators as the capability of on-board diagnostic systems improves.

Request for Approval
New Flyer requests approval to show all additional visual indicators through the Instrument Panel's Touchscreen LCD as opposed to providing space for future LED indicators.

The Instrument Panel allows the addition of visual indicators without having to worry about physical space restriction.

Please see attached **SIB 286-003 LCD Dash Display** for more information.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 71 PDF Page Number 94 Attachment No

Specification Language	**Request for Approval**
The lever shall be located on the street side of the driver's area approximately 16 inches to the street side of the driver's seat centerline, forward of the seat, and approximately 23 inches above the floor in the driver's area.	New Flyer requests approval to mount the door controller on the streetside of the driver's area. The exact location of this door controller will be the same as what was provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 18 Section Title WINDOWS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 73 PDF Page Number 98 Attachment No

Specification Language	**Request for Approval**
A minimum of 10,000 square inches of window area, including door windows, shall be required on each side of the standard configuration bus.	New Flyer requests approval to provide a minimum of 8000 sq in. of window area, including operator and door windows, shall be required on each side of the standard configuration bus for 35ft bus per APTA recommendations

GPTD Response:

Approved ☑ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 18 Section Title WINDOWS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 74 PDF Page Number 99 Attachment No

Specification Language	**Request for Approval**
DRIVER'S SIDE WINDOW The driver's side window glazing material shall have a ¼ inch or 6 mm nominal thickness laminated safety glass conforming to the requirements of ANSI Z26.1 Test Grouping 2 and the Recommended Practices defined in SAE J673.	New Flyer requests approval to provide an Operator's side window with tempered glazing to match the side windows.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 19 Section Title HEATING VENTILATING AND AIR CONDITIONING

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 76 PDF Page Number 102 Attachment No

Specification Language
STEPWELL HEATERS
Heat shall be applied to the front step tread to prevent accumulation of snow, ice, or slush. Stepwell heat shall be controlled by a switch mounted in the driver's area.

Request for Approval
New Flyer requests approval that our stepwell heater is defroster controlled (tech summary states this information). The control for defroster is located in the driver's area.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 19 Section Title HEATING VENTILATING AND AIR CONDITIONING

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

AE Number 75 PDF Page Number 100 Attachment No

Specification Language	**Request for Approval**
The District currently uses ThermoKing T14-M6 units on their coaches.	New Flyer requests approval to prvoide Thermo King RLF rooftop A/C unit, same as previous build SR-2492.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 20 Section Title SIGNAGE AND COMMUNICATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 78 PDF Page Number 103 Attachment No

Specification Language	**Request for Approval**
A "Stop Requested" message in red letters shall be illuminated when the passenger "Stop Requested" signal system is activated. The "Stop Requested" message shall remain visible until one or both passenger doors are opened. The message shall be visible to the seated driver and seated passengers.	New Flyer reqeusts approval to provide a "Stop Requested" sign that is visible to all seated passengers and a stop request indicator light displays on the instrument panel for the driver.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 20 Section Title SIGNAGE AND COMMUNICATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 77 PDF Page Number 102 Attachment No

Specification Language	**Request for Approval**
Interior Displays Provisions shall be made on the rear of the driver's barrier for a schedule holder to support ten separate passenger timetables that are sized four inches wide and nine inches high. The Transit Information Products Model # OBIC T 10P 2L meets these criteria	New Flyer would like to advise that the Transit Information Products OBIC T 10P 2L is no longer available and requests approval to supply or manufacture a similar on-board information station. New Flyer requets approval

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
Strike this item from specification.

GE
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 60 PDF Page Number 85 Attachment No

Specification Language	**Request for Approval**
Access doors shall be hinged with gas props or over-center springs, where practical, to hold the doors out of the mechanic's way.	New Flyer requests approval to provide two interior access doors that do not meet this requirement. The rear bulkhead access panels are not hinged or held open with gas props or springs. They are retained with captive hardware. The front wheelchair mechanism access door is hinged but not held open with a gas prop or strut.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 59 PDF Page Number 84 Attachment Yes

Specification Language	**Request for Approval**
Access panels shall be provided to allow servicing of components located behind light panels. If necessary, the entire light fixture shall be hinged.	New Flyer requests approval to provide New Flyer Genuine (TCB) interior lighting that has quick access easily removable panels which are held in place by filler strips and snap into the light panel extrusion. Please see attached **SIB 277-001 LED Lighting** for additional information.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 61 PDF Page Number 85 Attachment No

Specification Language
Access doors for the door actuator compartments shall be secured with locks, and shall prevent entry of mechanism lubricant into the bus interior. The locks shall be standardized so that only one tool is required to open access doors on the bus.

Request for Approval
New Flyer requests approval to provide the following interior access panels and doors that are secured with short wing quad latches (non-locking):

Entrance door mech box
Destination Sign compartment
Driver's locker
Wheelchair mech box

In addition, the rear bulkhead side access panels are retained with captive screws.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 62 PDF Page Number 85 Attachment No

Specification Language	**Request for Approval**
Flooring material shall be flush with the floor and shall be edge-bound with stainless steel, or other material that is acceptable to the District, to prevent the edges from coming loose.	New Flyer requests approval for a driveshaft access panel that is manufactured completely out of polyurethane and is not edge bound with trim. The panel has a recessed area which is covered in flooring material to match the bus interior. The flooring material in this area is secured using approved adhesive and is edge sealed using approved sealant.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GL
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 64 PDF Page Number 85 Attachment Yes

Specification Language
Hip-to-knee room, measured from the front of one seat back cushion horizontally across the highest part of the seat cushion to the seat or panel immediately in front, shall be no less than 26.5 inches. At all seating positions in paired transverse seats immediately behind other seating positions hip-to-knee room shall be no less than 28 inches.

Request for Approval
New Flyer requests approval to provide the hip-to-knee measurements shown on seat layouts. Per this layout, the hip-to-knee measurements range between 27.15" and 27.26" on the lower deck and between 26.51" and 30.76" on the upper deck. However, New Flyer is able to provide foot room that measures down to 10" at the curbside seat location immediately aft of the exit door.

This is due to the structure at this location and is the same as provided in previous builds.

Please see attached **DWG 445309**.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 63 PDF Page Number 84 Attachment No

Specification Language
Interior lights shall be individually dimmable.

Request for Approval
New Flyer requests approval to provide interior lights that are dimmable through PLC Programming. The light intensity settings are pre-set and it cannot be adjusted manually by the operator.

This is the same as provided in previous builds.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
Lights must be dimmable by manually adjusting without use of computer programming.

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 56 PDF Page Number 81 Attachment No

Specification Language	**Request for Approval**
Driver Barrier The barrier shall extend from the floor to the ceiling and shall fit the bus side windows, wall, and ceiling panels to prevent passengers from reaching the driver or the driver's personal effects.	New Flyer requests approval that the driver's barrier is formed by the front side of the SDS enclosure and extends from the top of the wheelhouse to the ceiling.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 55 PDF Page Number 81 Attachment No

Specification Language	**Request for Approval**
Driver Barrier A barrier or bulkhead between the driver and the street-side front passenger seat shall be provided. The barrier shall minimize glare and reflections in the windshield directly in front of the barrier from interior lighting during night operation.	New Flyer requests approval that the driver's barrier is formed by the front side of the SDS enclosure which extends from the top of the wheelhouse to the ceiling.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GE
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 58 PDF Page Number 82 Attachment No

Specification Language	**Request for Approval**
Modesty Panels Modesty panels shall extend no higher than the lower daylight opening of the side windows and those forward of transverse seats shall extend downward to a level between 1½ and 1 inches above the floor.	New Flyer requests approval to provide a rear streetside modesty panel which extends up to 8.8" from the floor.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 57 PDF Page Number 82 Attachment No

Specification Language	**Request for Approval**
Storage Box An enclosed driver storage compartment shall be provided with a positive latching door and/or lock, located on top of the curb-side wheelhousing. The minimum size for compartment shall be 5000 cubic inches.	New Flyer requests approval to provide Storage box above the seated driver with or without storage box behind the seated driver. Details of the storage box options are as follows: 1 - Storage box above the seated driver, standard on all buses: 12"H x 13-19"L x 9W (~1728 in.3) 2 - Storage box behind the seated driver: 12"H x 19"L x 7"W (~1596 in.3) Space in driver's area does not allow for anything larger. Please note that a keyed lock can only be provided on Option #2. Please confirm the preference on storage box option.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
Metro requests a storage compartment on curbside wheelhousing in addition to glove box above drivers head. EP

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 52 PDF Page Number 80 Attachment Yes

Specification Language
EXTERIOR LIGHTING
The lights may be positioned above or below the lower daylight opening of the windows and shall be shielded to protect passengers' eyes from glare.

Request for Approval
New Flyer requests approval to provide door header lights manufactured by Smartrend. These lights meet the illumination requirement of no less than 1 foot candle for a distance of 3 feet outward from the lowest step tread edge and are the same as provided on previous Xcelsior builds.

Please see attached DWG 426010.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 51 PDF Page Number 80 Attachment No

Specification Language	**Request for Approval**
EXTERIOR LIGHTING Lights located on the roof and sides (directionals) of the bus shall have protective shields or be of the flush mount type to protect the lens against minor impacts including daily washing by an automatic bus washer.	New Flyer requests approval to provide marker and clearance lights along the roofline which are low profile. They are not flush and do not have protective shields. These lights are low profile and shall preclude breakage by tree limbs, or bus washers and etc.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 54 PDF Page Number 80 Attachment No

Specification Language	**Request for Approval**
INTERIOR PANELS Interior side trim panels below the windows shall be textured stainless steel. Above windows and driver's barrier shall be plastic, or melamine-type material.	New Flyer requests approval to provide the following interior materials: 1) Ceiling panels made of ABS plastic 2) A driver's barrier that is formed by the front side of the SDS enclosure and extends from the top of the wheelhouse to the ceiling. This is inherent to the design of the Xcelsior bus. 3) Lower sidewall panels that are melamine in lieu of leather textured SST or anodized aluminum.

GPTD Response:

Approved ☐ Denied ☒ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 53 PDF Page Number 78 Attachment Yes

Specification Language
The inside surface of the battery compartment's access door shall be electrically insulated, as required, to prevent the battery terminals from shorting on the door if the door is damaged in an accident or if a battery comes loose.

Request for Approval
New Flyer requests approval to provide a battery access door that is electrically insulated by a rubber pad.

Please note that the battery terminals are also covered with rubber terminal boots to provide further protection from shorting on the door. Also note that the battery compartment is made of polyethylene, which, has high electrical resistance.

Please see attached SIB 260-001 Battery System for more information.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 11 Section Title GENERAL

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 44 PDF Page Number 75 Attachment No

Specification Language	**Request for Approval**
Strength Sheet metal screws shall not be used to retain the floor and all floor fasteners shall be serviceable from one side only. Tapping plates, if used for the floor fasteners, shall be no less than the same thickness as a standard nut and all floor fasteners shall be secured and protected from corrosion for the service life of the bus.	New Flyer requests approval to provide floor tapping plates that measure between 1/8" to 1/4" in thickness (less than a standard nut). The thinner tapping plates provide the required strength without adding unnecessary extra weight to the bus. This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF

Signature of GPTD Official

Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 11 Section Title GENERAL

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 43 PDF Page Number 75 Attachment No

Specification Language	**Request for Approval**
FLOOR Where the floor meets the walls of the bus, the surface edges shall be blended with a circular section of radius not less than 1 inch and a molding or cove shall prevent debris accumulation between the floor and wheel housings.	New Flyer requests approval to provide a floor covering in the lower area that only extends seamlessly up the sidewall for at least 4 inches and is locked in place by the seat track. Flooring on the upper level does not extend up the wall, however, a stainless steel molding is provided which encloses and seals the edge between the floor and the wall. This is inherent to the bus design and was provided on previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GE
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 47 PDF Page Number 77 Attachment No

Specification Language	**Request for Approval**
SERVICE COMPARTMENTS AND ACCESS DOORS Access doors larger in area than 100 square inches shall be equipped with latches. The latches shall be standardized and shall be openable without the use of a key or tool.	New Flyer requests approval to provide square key locks for all large exterior access doors. We can provide slam latches on the engine door, side console and fusebox doors but there is insufficient space on the radiator, defroster and battery doors to mount slam latches.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 48 PDF Page Number 78 Attachment No

Specification Language
BUMPERS
Bumpers shall provide impact protection for the front and rear of the bus with the top of the bumper being 27 in., ±2 in., above the ground.

Request for Approval
New Flyer requests approval to provide a front bumper height of 24 inches (610 mm) at the center line of the bus and a height at the outer edges of 27 inches (686 mm) from the street level at ride height. The proposed bumper is designed to fit the esthetic look of the Xcelsior, and has been impact tested in accordance with the APTA Standard Bus Procurement Guidelines.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 11 Section Title GENERAL

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 45 PDF Page Number 76 Attachment No

Specification Language	**Request for Approval**
Construction Wheel housings shall be constructed of 1/8" stainless steel. Wheel housings, as installed and trimmed, shall withstand impacts of a 2-inch steel ball with at least 200 foot-pounds of energy without penetration.	New Flyer requests approval to provide the front, center and rear wheelhouse tubs constructed of 18-gauge 201 -type stainless steel per ASTM A240. The vertical panels on the front tubs are 16ga. stainless steel. The vertical panels on the center tubs are 7ga. stainless steel. The vertical panels on the rear tubs 11ga. stainless steel. The different gauge material is used to accommodate the welding process and to avoid "oil canning".

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 46 PDF Page Number 76 Attachment No

Specification Language
REPAIR AND REPLACEMENT
Exterior panels below the rubrail shall be divided into sections that are repairable...
Exterior side panels above the rubrail, where used, and below the lower daylight opening shall be repairable or replaceable

Request for Approval
New Flyer requests approval to remove the requirement for rubrails. Our Xcelsior platform does not utilize rubrails.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
Rubrails not required.

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 11 Section Title GENERAL

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 42 PDF Page Number 75 Attachment Yes

Specification Language
JACKING
Jacking pads located on the axle or suspension near the wheels shall permit easy and safe jacking with the flat tire or dual set on a 6-inch-high run-up block not wider than a single tire.

Request for Approval
New Flyer requests approval to provide jacking pads that are located on the structure, not on the axles or suspension.

Please see attached **DWGs 354153 and 352240** for your review.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GA
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 11 Section Title GENERAL

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 41 PDF Page Number 73 Attachment No

Specification Language	**Request for Approval**
CRASHWORTHINESS Exterior panels below the rubrail and their supporting structural members shall withstand a static load of 2,000 pounds applied perpendicular to the bus anywhere below the rubrail by a pad no larger than 5 inches square.	New Flyer requests approval to remove the requirement for rubrails.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
Rubrails not required. Crashworthiness requirement must be met.

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 10 Section Title PNEUMATIC SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 40 PDF Page Number 72 Attachment Yes

Specification Language	**Request for Approval**
AIR SYSTEM DRYER An air dryer shall prevent accumulation of moisture and oil in the air system. The air dryer system shall include a replaceable desiccant bed, electrically heated drain, and activation device.	New Flyer requests approval to provide a Haldex Gemini MDxTM. This is composed of dual Haldex DRYest® air dryers working in parallel, packaged with a single Consep® Contaminant separator to create a single superior air treatment system. The Consep® separator provides a pre-treatment step that condense and separate 90% of contaminants and then expells them via a heated automatic drain valve. This occurs prior to air entering the dryers, reducing the amount of contaminants exposed to the dryer, thereby extending desiccant and purge and check valve life. Next, the air flows through dual Haldex DRYest® dryers plumbed in parallel to handle the increased flow of the standard boosted twin cylinder air compressor. The DRYest® dryers feature 5 stage MTC+® desiccant technology, which removes the remainder of the contaminants and the vast majority of the moisture content, resulting in very low dew point air exiting the dryer package. Each dryer is also equipped with a purge valve to automatically expel the moisture and contaminants collected and to regenerate the desiccant at each governor unload cycle, as well as a heater to ensure proper operation in sub-freezing temperatures Please see attached **SIB 246-060-X-Gemini MDx (Air Dryer)** for additional information

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 10 Section Title PNEUMATIC SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 39 PDF Page Number 71 Attachment No

Specification Language	**Request for Approval**
Other lines necessary to maintain system reliability shall be flexible Teflon hose with a braided stainless steel jacket.	New Flyer requests approval to provide flexible air lines which are manufactured by Manuli and come equipped with plated steel fittings. This is the same as provided on previous builds including the most recent SR-2492.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 10 Section Title PNEUMATIC SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 37 PDF Page Number 71 Attachment No

Specification Language
The air system shall be protected by a pressure relief valve set at 150 psi and shall be equipped with check valve and pressure protection valves to assure partial operation in case of line failures.

Request for Approval
New Flyer requests approval to provide the following pressure relief valves and respective settings:

Wabco compressor @ 275 psi
Muffler tank (NFI) @ 175 psi
Haldex Gemini dryer @ 160 psi
Wet tank (NFI) @ 150 psi

New Flyer provides a check valve on the inlet to the wet tank.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 10 Section Title PNEUMATIC SYSTEM

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 38 PDF Page Number 71 Attachment No

Specification Language
Nylon tubing shall be installed in accordance with the following color-coding standards:
- Green: Indicates primary brakes and supply.
- Red: Indicates secondary brakes.
- Brown: Indicates parking brake.
- Yellow: Indicates compressor governor signal.
- Black: Indicates accessories.

Request for Approval
New Flyer requests approval to add blue nylon tubing for the suspension.

New Flyer identifies suspension air lines separately to aid in service troubleshooting and preventative maintenance activities.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 07 Section Title SUSPENSION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 35 PDF Page Number 69 Attachment Yes

Specification Language
The front axle shall be non-driving with a load rating sufficient for the bus loaded to GVWR and shall be equipped with oil-type front wheel bearings and seals.

Request for Approval
New Flyer requests approval to provide a front axle and suspension installation that consists of a MAN VOK-07-F low floor axle complete with wheel hub assembly, brake caliper & brake disc assembly, center link assembly, tie rod arms and a steering arm.

The axle assembly also includes ABS sensor and pulse generating wheel. The brake chambers are mounted directly on the disc brake caliper assembly.

The MAN front axle is designed with a grease-packed unitized bearing.

This is inherent to the bus design and was provided on previous builds.

Please see attached **SIB 203-002 Front Axle and Suspension**.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GD
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 08 Section Title STEERING

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 36 PDF Page Number 70 Attachment No

Specification Language
Force to activate the brake pedal control shall be an essentially linear function of the bus deceleration rate and shall not exceed 50 pounds at a point 7 inches above the heel point of the pedal to achieve maximum braking.

Request for Approval
New Flyer requests approval to provide a force to activate the brake pedal control which is an essentially linear function of the bus deceleration rate and that does not exceed 70 pounds at a point 7 inches above the heel point of the pedal to achieve maximum braking. Adjusting braking efforts could compromise FMVSS 121 and therefore is not available.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 07 Section Title SUSPENSION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 33 PDF Page Number 69 Attachment No

Specification Language	**Request for Approval**
A warning light mounted near the curbside of the front door, minimum 3" diameter, amber lens shall be provided that will blink when kneel feature is activated and throughout operation.	New Flyer requests approval to provide a kneeling light which is 2.5 inches in diameter.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 07 Section Title SUSPENSION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 34 PDF Page Number 69 Attachment No

Specification Language
Over-raise
Air ride system shall have a manually operated over-raise system designed to raise the front of the bus 3 inches when activated. After activation system will automatically "bleed out" back to regular ride height after a period of not more than 30 seconds.

Request for Approval
New Flyer requests approval to provide the over raise/high ride feature with our Smartrider Lite advanced smart leveling system that uses intelligent kneeling on the front axle . This feature will raise the front axle 2 inches above normal ride height for clearing curbs and steep inclines. This would raise the front door to 16 inches, same as previous build SR-2492.

New Flyer can provide this feature on all axles with the SmartRider™ Plus system at an additional cost.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 24 PDF Page Number 65 Attachment No

Specification Language	**Request for Approval**
Hydraulic Systems Sensors in the hydraulic system, excluding those in the power steering system, shall indicate on the driver's on-board diagnostic panel conditions of low hydraulic fluid level.	New Flyer requests approval to remove this requirement from the specification as it applies to hydraulic cooling systems which are no longer provided. This is inherent to the Xcelsior Bus Design.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 23 PDF Page Number 64 Attachment No

Specification Language	**Request for Approval**
Service Engine oil and the radiator filler caps shall be hinged to the filler neck and closed with spring pressure or positive locks.	New Flyer requests approval to provide both engine oil and radiator caps that are tethered not hinged. The tethered caps are a Cummins requirement.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GA
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 25 PDF Page Number 65 Attachment No

Specification Language
Radiator piping shall be stainless steel or brass tubing and, if practicable, hoses shall be eliminated. Necessary hoses shall be premium rubber type that is impervious to all bus fluids.

Request for Approval
New Flyer requests approval to provide the following flexible synthetic rubber lines with standard crimped end fittings manufactured by Manuli Rubber Industries and Aeroquip. Manuli hoses are constructed from oil-resistant synthetic rubber and reinforced with single high-tensile steel braid. Manuli hoses are known for their high ozone, weather and heat resistant properties. All hose assemblies are skived and crimped with two-piece fittings.

Equator 1 (EQ1) / Equator 2 (EQ2) / 2807 PTFE / GH100, to accommodate the different ratings as required. Highly durable extruded PTFE tube with stainless steel wire braid. Operating temperature Range -73°C to + 260°C. Meets SAE 100R14A.

Our size 8 fuel lines have SAE/JIC 37° fittings.

The proposed hoses meet or exceed the operating parameter requirements. Manuli hoses are rated for extended temperature range.

This is inherent to the bus design and was provided on previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 07 Section Title SUSPENSION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 31 PDF Page Number 69 Attachment No

Specification Language
These fittings shall be located for ease of inspection, and shall be accessible with a standard grease gun without flexible hose end from a pit or with the bus on a hoist.

Request for Approval
New Flyer requests approval to use a flexible hose end. Our grease fittings are not all accessible to allow a rigid tube end grease gun to be used.

The current vehicle design requires the use of a flexible hose end to access certain fittings. This is a commonly accepted maintenance practice in the industry.

GPTD Response:

Approved ☒ X Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 28 PDF Page Number 67 Attachment No

Specification Language	**Request for Approval**
The DEF filler shall accommodate a standard nozzle. The nozzle shall automatically shut off when the tank is essentially full. The DEF filler cap shall be a screw-on cap and located curbside.	New Flyer requests approval to provide twisted DEF filler cap #535455, same as previous build SR-2492.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 27 PDF Page Number 66 Attachment Yes

Specification Language
FUEL SYSTEM
The capacity of the fuel tank(s) shall be a minimum of 110 gallons.

Request for Approval
New Flyer requests approval to provide a suitably sized Cross-linked polyethylene diesel fuel tank with a capacity of 100 useable US gallons, pressure filled.

Please see attached **SIB 241-003 Polyethylene Diesel Fuel Tank.**

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 29 PDF Page Number 64 Attachment No

Specification Language
A guarded on/off switch will be mounted in the driver's compartment.

Request for Approval
New Flyer requests approval to mount the retarder disable switch on the driver's sawtooth (located above the driver).

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 30 PDF Page Number 62 Attachment No

Specification Language
COOLING SYSTEMS
All low points in the water-based cooling system shall be equipped with drain cocks. Air vent valves shall be fitted at high points in the cooling system unless it can be demonstrated that the system is self-purging.

Request for Approval
New Flyer requests approval to provide a radiator that is equipped with a drain cock. All other lower points have a basic hex drain plug.

This is the same as provided in previous builds.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 05 Section Title VEHICLE PERFORMANCE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 18 PDF Page Number 0 Attachment Yes

Specification Language
ACCELERATION
The acceleration shall meet the requirements below and shall be sufficiently gradual and smooth to prevent throwing standing passengers off-balance. Acceleration measurement shall commence when the accelerator is depressed - (Idle Start.)

Request for Approval
New Flyer would like to advise, on behalf of Voith Turbo, that while acceleration requirements have been met, Voith offers no guaranties as to actual vehicle performance. This will vary due to component influences and characteristics, which are beyond their control.

Please see attached **iSCAAN Voith report**.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 05 Section Title VEHICLE PERFORMANCE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 17 PDF Page Number 0 Attachment Yes

Specification Language
GRADABILITY
Gradability requirements shall be met on grades with a dry commercial asphalt or concrete pavement at GVWR with all accessories operating. The power plant shall enable the bus to maintain a speed of 40 mph on a 2½ percent grade and 7 mph on a 16 percent grade.

Request for Approval
New Flyer would like to advise, on behalf of Voith Turbo, that while gradability requirements have been met, Voith offers no guaranties as to actual vehicle performance. This will vary due to component influences and characteristics, which are beyond their control.

Please see attached iSCAAN Voith report.

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 19 PDF Page Number 61 Attachment Yes

Specification Language
The cooling system in new condition shall have an ambient capacity of at least 110° F with water as coolant and sea level operation. Cooling system shall be sealed around the perimeter between the radiator and charge air cooler to prevent recirculation; side-by-side (tandem) arrangement is preferred.

Request for Approval
New Flyer requests approval to provide EMP Gen IV cooling system which is a stacked radiator/CAC combination, not side-by-side.

Please see attached DWG 602692.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 20 PDF Page Number 62 Attachment No

Specification Language
A spring-loaded, push button type valve to safely release pressure or vacuum in the cooling system shall be provided with both it and the water filler no more than 60 inches above the ground and both shall be accessible through the same access door.

Request for Approval
New Flyer requests approval for pressure to be released by a lever and for coolant to be filled via the coolant recovery tank, not the surge tank access door (where the lever is located). The fill location is approximately 60" above the ground.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 21 PDF Page Number 62 Attachment No

Specification Language	**Request for Approval**
The radiator, and charge air cooler if integrated, shall be of durable corrosion-resistant metal construction with bolted-on removable tanks.	New Flyer requests approval to provide aluminum bar/plate heat exchangers with cast/hardened aluminum tanks welded onto the core. This is inherent to the EMP design.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 06 Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 22 PDF Page Number 62 Attachment No

Specification Language	**Request for Approval**
The engine cooling system shall be equipped with a properly sized water filter with a spin-on element filter.	New Flyer requests approval to remove this requirement as Cummins no longer requires a water filter due to additives included in the coolant.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 05 Section Title VEHICLE PERFORMANCE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 16 PDF Page Number 0 Attachment No

Specification Language	**Request for Approval**
TOP SPEED The bus shall be capable of a top speed of 70 mph (for emergency and passing maneuvers) on a straight, level road at GVWR with all accessories operating.	New Flyer requests approval that the bus will be capable of safely maintaining a vehcile speed of 65mph, as the tires are rated for a top speed of 65 mph.

GPTD Response:

Approved ☒ Denied ☐ Noted ☐

Comments:

CF
Signature of GPTD Official

3/3/22
Date

APPROVED EQUALS REQUEST FORM

New Flyer of America
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 05 Section Title VEHICLE PERFORMANCE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:
AE Number 15 PDF Page Number 0 Attachment No

Specification Language	**Request for Approval**
The engine shall meet all regulatory requirements when operating on fuel equal to CARB Specifications for Compressed Natural Gas #2292.5.The four predominant characteristics that must be met are methane, ethane, butane and propane.	New Flyer request approval to delete CNG CARB specifications requirement as this does not apply to diesel bus

GPTD Response:

Approved ☐ Denied ☐ Noted ☒

Comments:
This is a typo. All buses to be diesel

GP
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 20. Section Title SIGNAGE AND COMMUNICATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

An automatic electronic destination sign system shall be furnished on the front, on the right side near the front door and rear of the bus

Question, Clarification or approved equal:

GILLIG requests approval to provide Hanover's White LED Destination Sign System for this requirement. The proposed system will include the following:

- White LED Front Sign, 17 rows by 160 columns, with a display area of 8.75 in. tall by 64.75 in. wide.
- White LED Side Sign, 8 rows by 96 columns, with a display area of 3.5 in. tall by 37.25 in. wide.
- White LED Rear Sign, 15 rows by 48 columns, with a display area of 6.4 in. tall by 18.125 in. wide.
- Hanover's ERIC++ Operator System Controller

The Destination Sign reprogramming process uses a standard USB memory device instead of PCMCIA.

Please see attached.

Adobe Acrobat Document

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 20. Section Title SIGNAGE AND COMMUNICATION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

An automatic electronic destination sign system shall be furnished on the front, on the right side near the front door and rear of the bus

Question, Clarification or approved equal:

GILLIG requests approval to provide Luminator's Smart Series 3 Destination Signs for this requirement.

The Smart Series 3 signs have more pixels than required by the specification, but the dimensional requirements for the front sign are slightly different than the specification:

- Front Sign, 16 rows by 160 columns (2560 pixels), with a display area of 8.0 in. tall by 64.5 in. wide.
- Side Sign, 14 rows by 112 columns (1568 pixels), with a display area of 4.3 in. tall by 42.3 in. wide.
- Rear Sign, 16 rows by 48 columns (768 pixels), with a display area of 6.1 in. tall by 17.9 in. wide.

The Destination Sign reprogramming process uses a standard USB memory device instead of PCMCIA becoming increasingly difficult to find in the marketplace

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 19. Section Title HEATING VENTILATING AND AIR CONDITIONING

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The district currently uses ThermoKing T14-M6 units on their coaches.

Question, Clarification or approved equal:

GILLIG requests approval to provide a rear mounted Thermo King unit to satisfy the HVAC requirements.

Our proposal will include the Thermo King T14M unit with EBM Brushless Motors, X430 Compressor, R134a and 20% fresh air intake.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 18. Section Title WINDOWS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement: Side window glazing material shall have a ¼-inch nominal thickness tempered safety glass
Question, Clarification or approved equal: GILLIG requests approval to provide 3/16" tempered safety glass with film guard lining. This is GILLIG's standard hidden frame window configuration, which is utilized in buses throughout the nation.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GA
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 17. Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The run switch shall be a four-position rotary switch with the following functions:

Question, Clarification or approved equal:

GILLIG requests approval to provide a (4) position rotary switch the following functions:

- OFF: All electrical systems off, except power available for the stoplights, hazard lights, horn, fire detection equipment, engine compartment lights and electronic equipment that require continuous energizing.
- DAY RUN: All electrical systems and engine on, except the headlights, parking lights and marker lights.
- NITE RUN: All electrical systems and engine on.
- MARKER LIGHTS: All electrical systems on and engine off.

This is inherent of the GILLIG design and a standard on the GILLIG Low Floor bus.

GPTD Response:

Approved: ☒ **Denied:** ☐ **Noted:** ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 16. Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Hydraulic systems incorporated in the ramp mechanism shall comply with the requirements defined in Part IV. The Lift U ramp model#LU11-08-05 meets these requirements.

Question, Clarification or approved equal:

GILLIG requests approval to provide a fold-out wheelchair ramp dual mode model LU-18 manufactured by Lift-U and operated by an electric motor located at the entrance door. The ramp dimensions are a nominal thirty-one inches (30") wide and the extended length outside the bus is 48-inches.

Please see attached.

Adobe Acrobat Document

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 16. Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Each door opening clear width shall be no less than 30 inches with the doors fully opened. When open, the doors shall leave an opening no less than 84.5 inches in height. Allowable projection into the door opening is shown on the figure "Transit Coach Minimum Door Opening." Projections shall not form a hazard to passengers. The open doorway clear width, including door-mounted passenger assists, shall be no less than 24 inches for each doorway, or equivalent facilitation in accordance with ADA described in 49 CFR Part 38 as determined by the FTA.

Question, Clarification or approved equal:

GILLIG requests approval to provide rear door dimensions as follows:

- Door frame height 80.39"
- Door frame width 34"
- Opening width to door panel 30.35"
- Opening width to handle 26"

This is standard on the GILLIG Low Floor bus and inherent to the GILLIG design.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 16. Section Title PASSENGER ACCOMMODATIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Each door opening clear width shall be no less than 30 inches with the doors fully opened. When open, the doors shall leave an opening no less than 84.5 inches in height. Allowable projection into the door opening is shown on the figure "Transit Coach Minimum Door Opening." Projections shall not form a hazard to passengers. The open doorway clear width, including door-mounted passenger assists, shall be no less than 24 inches for each doorway, or equivalent facilitation in accordance with ADA described in 49 CFR Part 38 as determined by the FTA.

Question, Clarification or approved equal:

GILLIG requests approval to provide front door dimensions as follows:

- Door frame height 78.48"
- Door frame width 40"
- Opening width to door panel 35.74"
- Opening width to handle 32.23"

This is standard on the GILLIG Low Floor bus and inherent to the GILLIG design.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 14. Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

In addition to the farebox, each bus will be fitted with a tablet and smart card reader at the front of the bus by GPTD upon delivery. Each bus shall be equipped with two CAT 6 Ethernet cables coiled in the dash with a minimum of 6' of slack to connect to these devices. Ethernet cables shall terminate in the electronics cabinet behind the bus operator.

There will be two additional independent 12v power supplies on 15 amp breakers coiled in the dash with the Ethernet cables. This power service shall include a grounded lead with both wires enclosed in a flexible conduit.

Question, Clarification or approved equal:

GILLIG requests approval to delete the requirement for a flexible conduit. Due to the bend radius required on the Low Floor coach, GILLIG cannot provide conduit for this part of the installation. In lieu, GILLIG will provide the proper cabling and harnesses and route them to their appropriate locations without conduit.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. **Section Number** 14. **Section Title** INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

An enclosed driver storage compartment shall be provided with a positive latching door and/or lock, located on top of the curb-side wheelhousing. The minimum size for compartment shall be 5000 cubic inches.

Question, Clarification or approved equal:

In response to this section, GILLIG request approval to provide our standard overhead storage box that is 21"x8"x14.5" (2560 cubic in.) with a door and latch integrated into the operator barrier.

GPTD Response:

Approved: ☐ **Denied:** ☒ **Noted:** ☐

Comments:
Metro requests storage compartment on wheel housing in addition to over head storage compartment.

GP
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 12. Section Title STRUCTURE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Floor drains of noncorrosive materials shall be provided on the bus behind the front, wheelhouse near the wall to help drain any water that may accumulate due to ice, snow, rain, etc.

Question, Clarification or approved equal:

GILLIG requests clarification as to if floor drains are required on both the curb side and the street side.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:

Floor drains required on curb and street sides. Two drains lower section, two drains upper section, four in total.

CP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 12. Section Title STRUCTURE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Wheel housings shall be constructed of 1/8" stainless steel. Wheel housings, as installed and trimmed, shall withstand impacts of a 2-inch steel ball with at least 200 foot-pounds of energy without penetration.

Question, Clarification or approved equal:

GILLIG proposes to provide the wheel housing manufactured of 14 gauge 3CR12 type stainless steel. The Low Floor wheel housing complies with all design and performance requirements of this section and has been our current design for several years.

This inherent to the GILLIG design and there are no options at this time.

GILLIG requests approval.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GP
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 12. Section Title STRUCTURE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The bus axles or jacking plates shall accommodate the lifting pads of a 2-post hoist system. Jacking plates, if used as hoisting pads, shall be designed to prevent the bus from falling off the hoist. Other pads or the bus structure shall support the bus on jack stands independent of the hoist.

Question, Clarification or approved equal:

GILLIG requests approval to provide jacking points located on the front and rear axles, rather than jack pads mounted on the frame or body. This is the standard offering from Meritor and will permit easy and safe jacking with the flat tire or dual set on a 6 in. high run-up block not wider than a single tire.

GILLIG will provide the jacking points painted in yellow for ease of identification.

This is inherent of the GILLIG design and a standard on the GILLIG coach.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 12. Section Title STRUCTURE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The subfloor shall be SpaceAge Synthetics Thermo-Lite or equal composite flooring material that will provide a minimum 150 pound weight savings per bus to the standard 3/4 inch marine plywood subfloor product.

Question, Clarification or approved equal:

Where composite flooring is a requirement, GILLIG requests approval to provide a ¾ inch phenolic composite sub-floor manufactured by Milwaukee Composites, Inc. MCI developed this lightweight floor for the transit industry, and it is the only composite sub-floor available on a GILLIG coach.

The proposed configuration is consistent with the current production model buses and the buses currently operating in the Agency's bus fleet.

GPTD Response:

Approved: ☒ **Denied:** ☐ **Noted:** ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 7. Section Title SUSPENSION

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

A warning light mounted near the curbside of the front door, minimum 3" diameter, amber lens shall be provided that will blink when kneel feature is activated and throughout operation.

Question, Clarification or approved equal:

GILLIG requests approval to provide our standard 2" kneeling warning amber LED light mounted near the curb side of the front door.

This is standard on the GILLIG Low Floor bus, and it is consistent with buses previously delivered to the Agency.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 12. Section Title STRUCTURE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Where the floor meets the walls of the bus, the surface edges shall be blended with a circular section of radius not less than 1 inch and a molding or cove shall prevent debris accumulation between the floor and wheel housings.

Question, Clarification or approved equal:

GILLIG wishes to advise the Agency that the flooring in the raised rear platform area will be installed in a fully sealed butt joint configuration at the side wall. However, the flooring in the lower front section will be coved up the side walls.

This inherent to the GILLIG design and there are no options at this time.

GILLIG requests approval.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 5. Section Title VEHICLE PERFORMANCE

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The operating range of the coach run on the design operating profile shall be at least 350 miles with full fuel capacity.

Question, Clarification or approved equal:

GILLIG wishes to advise the Agency that each operation incorporates a wide variety of factors that directly affect the fuel mileage of the coach.

Due to the unique operating profiles of each customer, including terrain, traffic conditions, weather, idle time, and other factors beyond the manufacturers control, GILLIG requests concurrence that the fuel mileage as specified by the Agency is an expected mileage goal, and not a guaranteed minimum by the manufacturer.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 6. Section Title DRIVETRAIN

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Engine oil and the radiator filler caps shall be hinged to the filler neck and closed with spring pressure or positive locks.

Question, Clarification or approved equal:

GILLIG requests approval to provide twist on engine and radiator filler caps as seen below.

Each cap is designed to provide a positive lock, which prevents leakage, and are securely tethered to each fill neck assembly to prevent misplacement of the caps while filling.

GILLIG requests approval of our proven standard installation.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 4. Section Title OVERALL REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Rated capacity of the bus shall be no less than 32 seated passengers, not including the driver, with the specified seating arrangement.

Question, Clarification or approved equal:

GILLIG requests approval to provide a seat layout that seats (31) passengers and includes (2) Q'straint Q'pod ADA securement systems.

GILLIG is submitting a sample seat layout for the Agency's review. This is intended to only show a basic layout configuration—not to provide specific details or dimensions. If GILLIG is the successful bidder, we will provide a custom layout for the Agency's approval prior to production.

Please see attached.

Adobe Acrobat Document

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 4. Section Title OVERALL REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Based upon the Design Operating Profile defined in Part IV, Section 1 routine scheduled maintenance actions, such as filter replacement and adjustments, shall not be required at intervals of less than 6,000 miles, except for engine oil/filter change intervals for severe duty shown below, or as indicated from a regular oil analysis program and routine daily service performed during the fueling operations. Higher levels of scheduled maintenance tasks shall occur at even multiples of mileage for lower level tasks.

Question, Clarification or approved equal:

GILLIG would like to advise the Agency that all maintenance tasks should occur at the manufactures recommended interval, and those intervals may not be at even multiples. GILLIG's Service Manuals includes a schedule for all of the necessary maintenance tasks.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 4. Section Title OVERALL REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

With the exceptions of exterior mirrors, marker and signal lights, bumpers, fender skirts, washers, wipers and rubrail, the bus shall have the following overall dimensions as shown in the figure "Transit Coach Exterior Dimensions" at static conditions and design height.

Body Length: 35 feet ± 6 inches

Question, Clarification or approved equal:

GILLIG wishes to clarify that the 35' Low Floor bus is 36.01' in length.

This is consistent with the fleet of GILLIG buses previously delivered to the Agency.

GILLIG requests approval.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 4. Section Title OVERALL REQUIREMENTS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:
At the front door, the first step up from street level shall not exceed 15 inches with the bus at the design height.
Question, Clarification or approved equal: GILLIG wishes to clarify that the front doorstep height is 15.3". This is inherent to the GILLIG design and there are no options at this time. GILLIG requests approval.

GPTD Response:

Approved: ☒ **Denied:** ☐ **Noted:** ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 17. Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The bus shall be equipped with a variable speed windshield wiper for each half of the windshield, with separate controls for each side.

Question, Clarification or approved equal:

GILLIG requests approval to provide (2) electric operated, heavy duty windshield wipers manufactured by Sprague Industries, and controlled by a single knob.

The wipers are of the self-parking type, each controlled by individual motors with adjustable speed. The motors are mounted inside the bus and external provisions make for ease of inspection, maintenance, and replacement.

This is standard on a GILLIG Low Floor bus.

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 17. Section Title DRIVER PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

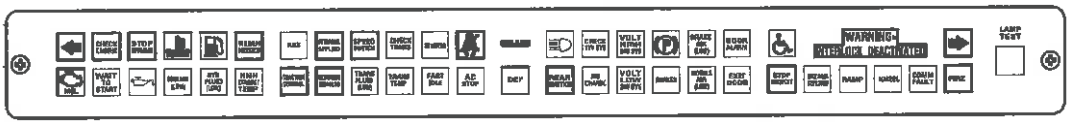
Space shall be provided on the panel for future additions of no less than 5 indicators as the capability of on-board diagnostic systems improves.

Question, Clarification or approved equal:

GILLIG requests approval to provide our standard operators diagnostic indicator lamp panel that does not have the capability of providing (5) additional indicators for future use. The current GILLIG indicator lamp panel assembly is fully compliant with current EPA and other sub-system requirements.

This is the only available indicator lamp panel assembly on a GILLIG Low Floor bus.

GILLIG request approval.



GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 14. Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Manufacturer shall provide a driver's barrier door. The barrier must be designed to protect the operator from physical assaults by passengers including thrown objects, spitting, punching, or other forms of violence. The barrier must be lockable to prevent ease of entry by unwanted persons and must include a window that can be opened by the operator to facilitate communication and interaction between the operator and passengers at the operator's discretion.

The window shall be manually operated and must be automotive grade safety glass. Plexiglas will not be accepted. The barrier must allow sufficient airflow to the driver to ensure the HVAC works effectively in the operator's area and include one or more ventilation fans. It must allow the operator to maintain visual contact with the passenger area of the bus. The barrier must not impede operator view of the road and mirrors or create any blind spots during normal driving operation.

The barrier must not unduly encroach upon the operator's workspace or impede the flow of passengers boarding or deboarding. The barrier must be of quality fit and finish without rattles, vibrations, or stresses to other components at attachment points. The frame and any stanchions added for mounting/latching purposes must be Stainless Steel or powder coated yellow to match the overall design of the bus interior

Question, Clarification or approved equal:

GILLIG request approval to provide the Vapor vShield Operator Protection Door to satisfy this requirement.
Please see attached.

PDF
Adobe Acrobat Document

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 14. Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Manufacturer shall provide a driver's barrier door. The barrier must be designed to protect the operator from physical assaults by passengers including thrown objects, spitting, punching, or other forms of violence. The barrier must be lockable to prevent ease of entry by unwanted persons and must include a window that can be opened by the operator to facilitate communication and interaction between the operator and passengers at the operator's discretion.

The window shall be manually operated and must be automotive grade safety glass. Plexiglas will not be accepted. The barrier must allow sufficient airflow to the driver to ensure the HVAC works effectively in the operator's area and include one or more ventilation fans. It must allow the operator to maintain visual contact with the passenger area of the bus. The barrier must not impede operator view of the road and mirrors or create any blind spots during normal driving operation.

The barrier must not unduly encroach upon the operator's workspace or impede the flow of passengers boarding or deboarding. The barrier must be of quality fit and finish without rattles, vibrations, or stresses to other components at attachment points. The frame and any stanchions added for mounting/latching purposes must be Stainless Steel or powder coated yellow to match the overall design of the bus interior

Question, Clarification or approved equal:

GILLIG request approval to provide the Arow Global's AROWGuard Driver Protection System to satisfy this requirement.
Please see attached.

Adobe Acrobat Document

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part II. Section Number 18. Section Title SPECIAL PROVISIONS

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Please provide separate line items in the cost proposal for training on vehicle electronics, HVAC, Multiplex, engine, transmission, hybrid technology. These lines items should indicate approximate number of hours of training and cost associated with these hours

Question, Clarification or approved equal:

GILLIG respectfully wishes to clarify that Engine, Transmission and HVAC training is specifically set-up per student. Please define the number of students and number of days required for this training.

GPTD Response:

Approved: ☒ **Denied:** ☐ **Noted:** ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part II. Section Number 20. Section Title Oil Analysis Upon Delivery

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The Contractor shall pay for engine and transmission oil analysis of each GPTD bus order. The day the buses are delivered to GPTD, GPTD personnel will take a sample of oil from the engine and transmission of each bus and send it to the oil analysis laboratory. GPTD will send a copy of the oil report to Contractor and will bill the Contractor for the cost of each sample.

Question, Clarification or approved equal:

GILLIG requests approval to delete the requirement for the contractor to pay for an engine and transmission oil analysis of each GPTD bus order, as this is not part of GILLIG's standard offerings.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 13. Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Colors will match DUPONT transit-grade white (#B8424 HN), with blue (PMS 3135) 8" stripe. Electronic pictures of our existing fleet can be forwarded to prospective bidders upon request.

Question, Clarification or approved equal:

GILLIG request approval to provide our standard Axalta Imron Elite low VOC 2.8 paints/coatings for this section.

The Axalta (Dupont) coatings supplied will be polyurethane enamel coatings matching specified colors and gloss. These coatings can be repaired with conventional paints/coatings available throughout the United States.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
Metro paint scheme has changed for orginal RFP see attached diagram.

GD

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 13. Section Title EXTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

Colors will match DUPONT transit-grade white (#B8424 HN), with blue (PMS 3135) 8" stripe.
Electronic pictures of our existing fleet can be forwarded to prospective bidders upon request.

Question, Clarification or approved equal:

GILLIG requests electronic pictures of the existing fleet.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments: See attached

GF
Signature of GPTD Official

3/3/22
Date

GREATER PORTLAND

metro

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer

RFP Part IV. Section Number 14. Section Title INTERIOR PANELS AND FINISHES

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Customer Specification Requirement:

The entire interior shall be cleanable with a hose, using a liquid soap attachment.

Question, Clarification or approved equal:

GILLIG requests approval to delete the requirement for the entire interior to be cleanable with a hose.

When cleaning the floor, GILLIG recommends using a broom and mop, and not a hose. GILLIG also recommends that caulking/sealer in flooring seams be regularly inspected and maintained' cracks in the flooring or at seams can allow water or other liquids to seep through and damage the flooring adhesive and the plywood floor.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:

GF 3/3/22

FORM 17
APPROVED EQUALS REQUEST FORM

GILLIG LLC
Proposer/Vehicle Manufacturer
Signature of GPTD Official Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part II Section Number 9 Section Title Excusable Delays/Force Majeure

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
1. The cause of the delay arises after the Notice of Award, and neither was nor could have been anticipated by the Contractor by reasonable investigation before such award. Such cause may include force majeure events such as any event or circumstance beyond the reasonable control of the Contractor, including but not limited to acts of God; earthquake, flood and any other natural disaster; civil disturbance, strikes and labor disputes; fires and explosions; war and other hostilities; or embargo.

Question/Clarification or Approved Equal:
Approval requested for the inclusion of the COVID-19 pandemic in the list of allowed exceptions to performance.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
Pandemic delays are included as long as all other criteria in Section 9 are met.

GP

Signature of GPTD Official

3/7/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part I Section Number 3 Section Title General Information and Background

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
The Greater Portland Transit District (the "GPTD"), a quasi-municipal agency, requests proposals for the manufacture and delivery of a base order of eleven (11) 35-foot, 12-year/500,000-mile transit diesel buses ("BASE" order) and ten (10) options for additional buses ("OPTIONAL" order) per the terms and conditions as set forth in this RFP.

Question/Clarification or Approved Equal:
Clarification requested on the size of bus required since the breakdown of equipment order on page 3, does not match Form1: Cost Proposal and Signature Pages on page 110 which calls out a 40' bus. Please provide clarification.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
This is a typo. All buses purchased on this contract are to be 35'.

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part II Section Number C.6. Section Title Payment

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Delivery of Books, Manuals, and MSO
All final customized parts books, diagrams, maintenance manuals and Manufacturer's Statement of Origin (MSO) shall be provided upon acceptance of each bus. If the manuals are not delivered with the acceptance of the last bus, 20% of the cost of the last bus will be withheld until all manuals are received by the GPTD.

Question/Clarification or Approved Equal:
Approval requested for the operator's manual and all other service and parts manuals to be provided within 30 days of vehicle delivery. Because our manuals are custom built to the specifics of your order, this will allow adequate generation time as ENC does not generate parts/service/operators' manuals until the vehicle has completed production and the bus has shipped, guaranteeing that all last-minute revisions are accounted for.

GPTD Response:

Approved: ☐ Denied: ☐ **Noted:** ☒

Comments:

Manual delivery within 30 days accepted. Note 20% hold-back will be maintained until manuals are received.

GP

Signature of GPTD Official

3/7/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part II Section Number 11 Section Title Compliance with Laws and Regulations

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Contractor shall at all times comply with all applicable laws, regulations, policies, procedures and directives (together, the "Law"), including without limitation, FTA regulations, policies, procedures and directives, including those listed directly or by reference in any agreement(s) between GPTD and FTA that funds or is otherwise applicable to any part of this Contract, as they may be amended or promulgated from time to time during the term of this Contract. Contractor's failure to so comply shall constitute a material breach of this Contract.

Question/Clarification or Approved Equal:
In addition to the specification as written, we request approval for the cost of any required Federal or State regulatory changes, (i.e., engine emission changes, etc.) that occur during the contract period be passed through to GPTD at the bus manufacturer's cost.

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GP 3/7/22

Signature of GPTD Official Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Finish and Color
All exterior surfaces shall be smooth and free of wrinkles and dents. Exterior surfaces to be painted shall be properly prepared as required by the paint system supplier, prior to application of paint to assure a proper bond between the basic surface and successive coats of original paint for the service life of the bus.

Question/Clarification or Approved Equal:
Approval requested for the AkzoNobel Sikkens paint system that has been developed specifically for ElDorado National - California's paint processes. Akzo Nobel's personnel conduct monthly audits of operations and processes as well as periodic re-certification of all ElDorado National - California's paint staff including any recently hired staff. Please reference attached brochure.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

CA

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Finish and Color
Electronic pictures of our existing fleet can be forwarded to prospective bidders upon request.

Question/Clarification or Approved Equal:
Please provide electronic pictures of your existing fleet, so adequate pricing may be provided.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
Existing 40' fleet paint scheme provided. Note paint scheme will need to be modified to fit 35' bus.

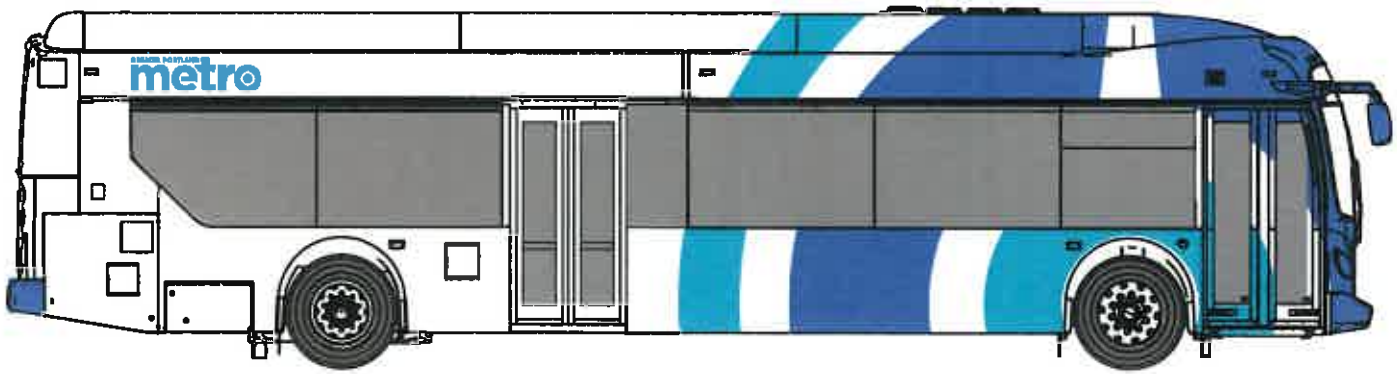
GF

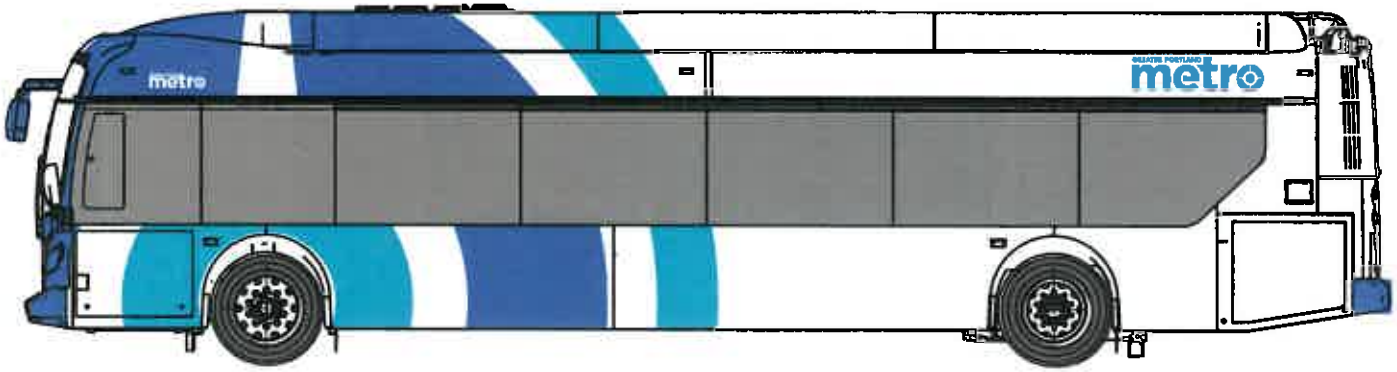
Signature of GPTD Official

3/3/22

Date

GREATER PORTLAND metro





sikkens

LV650
Basecoat/Topcoat

Features

- One system for all your needs
- HAPS Compliant
- Thousands of colors available
- More robust system
- High solids

Benefits

- Product assortment reduction, less inventory
- Meets all current environmental regulations
- More OE and Fleet color capabilities including metallics and pearls
- Superior sag resistance and improved results in hot and humid conditions
- Better coverage with only a cross coat application results in increased productivity

Autocoat® BT LV650 is latest innovation for the commercial market. The product, a multi-generational upgrade to the popular Autocoat LV, utilizes the same set of toners for both base clear and single stage systems. This capability was added in an effort to help businesses better manage their inventory. It also provides maximum application flexibility. LV650 was specifically designed to be used in either OE or repair markets. In either situation it enables commercial businesses to minimize inventory by providing one system for all application needs.

Autocoat BT

AkzoNobel

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Numbering and Signing
Monograms, numbers and other special signing specified by the District shall be applied to the inside and outside of the bus as required.

Question/Clarification or Approved Equal:
Please provide GPTD's decal specifics, so adequate pricing may be provided.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒ X

Comments:
Metro requires 6 outside bus numbers and 1 inside. Inside signage and decals are consistent with APTA standards.

CA

Signature of GPTD Official

3/3/21

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 19 Section Title Heating Ventilating and Air Conditioning

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Stepwell Heaters
Stepwell heater to be controlled by switch.

Question/Clarification or Approved Equal:
Approval requested for front stepwell heat to be hot air directed from a vent off of the defroster.

GPTD Response:

Approved: ☐ **Denied:** ☒ **Noted:** ☐

Comments:

GF

Signature of GPTD **Official**

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 19 Section Title Heating Ventilating and Air Conditioning

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Capacity and Performance
This air shall be composed of no less than 20 percent outside air. Airflow shall be evenly distributed throughout the bus with air velocity not exceeding 100 feet per minute on any passenger.
Heated air introduced into the bus shall contain no less than 20 percent outside air.

Question/Clarification or Approved Equal:
Clarification Provided on behalf of required HVAC vendor, Thermo King Corp, that Thermo King cannot guarantee a 20% ratio of fresh air to return air. This is a dynamic ratio and is a function of several factors. These include things such as merv rating of the filter/s, cleanliness of the filter/s, temperature differential between inside and outside the bus, what features/equipment is on the roof or surrounding the unit and is the bus moving vs. stationary. Please approve APTA Standard Bus Procurement guidelines requirement for 10 percent "Fresh Air" Mixture in lieu of 20 percent specified.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
Outside air goal is 20%. Minimum guaranteed outside 10%.

GF
Signature of GPTD Official

3/3/22
Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV **Section Number** 34 **Section Title** Warranty Requirements

Describe Request. Include **appropriate supporting documentation as outlined in the RFP:**

Specification in question:
Warranty will also pay for road calls (bus change out) that are caused **by equipment** breakdown **that** are **covered by warranty. The warranty charge** will be based on the **time** required multiplied by the labor rate. See **Proposal Requirements, Section 27.3d** for this labor rate.

Question/Clarification or Approved Equal:
Approval requested for the deletion of this requirement in its entirety as not a part on ENC standard warranty package. Please know that warranty for towing is covered in the base warranty from Cummins engine for engine related items and Allison Transmissions for transmission related items for 2 years.

GPTD Response:

Approved: ☒ X **Denied:** ☐ **Noted:** ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title Warranty Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
The warranty shall cover 100% parts costs and 100% labor costs.

Question/Clarification or Approved Equal:
Approval requested for the deletion of this requirement in its entirety as not a part of the ENC standard warranty package.

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title Warranty Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Extended Warranty (Propulsion System)
The propulsion system manufacturer's standard warranty, delineating items excluded from the Extended Warranty, should be submitted in accordance with the Request for Pre-Offer Change or Approved Equal

Question/Clarification or Approved Equal:
Per GPTD's request please see attached Extended Warranty Exclusions.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:

GF

Signature of GPTD Official

3/3/22

Date

NEW PRODUCT WARRANTY

Allison Transmission.

PARTICIPATING OEM SALES
DISTRIBUTOR SALES

LIMITED WARRANTY ON NEW ALLISON AUTOMATIC TRANSMISSIONS USED IN SHUTTLE & OTHER BUS APPLICATIONS–EXCEPT TRANSIT, SCHOOL BUS, INTERCITY BUS, or MOTORHOME

Allison Transmission, Inc. will provide for repairs or replacement, at its option, during the warranty period of each new Allison transmission listed below that is installed in a Bus, other than School Bus, Transit Bus, Intercity Bus, or Motorhome in accordance with the following terms, conditions, and limitations.

WHAT IS COVERED

- **WARRANTY APPLIES** — This warranty is for new Allison transmission models listed below installed in a Bus, other than School Bus, Transit Bus, Intercity Bus, or Motorhome and is provided to the original and any subsequent owner(s) of the vehicle during the warranty period.
- **REPAIRS COVERED** — The warranty covers repairs or replacement, at Allison Transmission's option, to correct any transmission malfunction resulting from defects in material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Allison Transmission determines most appropriate under the circumstances.
- **TOWING** — Towing is covered to the nearest Allison Transmission Distributor or authorized Dealer only when necessary to prevent further damage to your transmission.
- **PAYMENT TERMS** — Warranty repairs, including parts and labor, will be covered per the schedule shown in the chart contained in section "APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE."
- **OBTAINING REPAIRS** — To obtain warranty repairs, take the vehicle to any Allison Transmission Distributor or authorized Dealer within a reasonable amount of time and request the needed repairs. A reasonable amount of time must be allowed for the Distributor or Dealer to perform necessary repairs.
- **TRANSMISSION REMOVAL AND REINSTALLATION** — Labor costs for the removal and reinstallation of the transmission, when necessary to make a warranty repair, are covered by this warranty.
- **WARRANTY PERIOD** — The warranty period for all coverages shall begin on the date the transmission is delivered to the first retail purchaser, with the following exception:

  Demonstration Service –A transmission in a new truck or bus may be demonstrated to a total of 5000 miles (8000 kilometers). If the vehicle is within this limit when sold to a retail purchaser, the warranty start date is the date of purchase. Normal warranty services are applicable to the demonstrating Dealer. Should the truck or bus be sold to a retail purchaser after these limits are reached, the warranty period will begin on the date the vehicle was first placed in demonstration service and the purchaser will be entitled to the remaining warranty.

APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE

APPLICABLE MODELS	WARRANTY LIMITATIONS (Whichever occurs first)		ADJUSTMENT CHARGE TO BE PAID BY THE CUSTOMER	
	Months	Transmission Miles Or Kilometers	Parts	Labor
B 210, B 220, B 300, B 400, B 500	0–24	No Limit	No Charge	No Charge
1000 Series, 2000 Series, 2400 Series	0–36	No Limit	No Charge	No Charge
1000 PTS, 2100 PTS, 2200 PTS, 2350 PTS, 2500 PTS, 2550 PTS, 3000 PTS	0–36*	0–100,000 m 0–160 000 km	No Charge	No Charge

* Effective July 2006, the Allison transmission in your vehicle may be covered by additional extended coverage, dependent on the Original Equipment Manufacturer (OEM) which manufactured your vehicle. **This additional coverage requires continued use of an Allison Approved TES 295 automatic transmission fluid and genuine Allison filters.** Please consult your OEM Dealer or authorized Allison Transmission Distributor or Dealer for specific information.

WHAT IS NOT COVERED

- **DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION** — Defects and damage caused as the result of any of the following are not covered:
  - Flood, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle;
  - Misuse of the vehicle;
  - Installation into unapproved applications and installations;
  - Alterations or modification of the transmission or the vehicle, and
  - Damage resulting from improper storage (refer to long-term storage procedure outlined in the applicable Allison Service Manual)
  - Anything other than defects in Allison Transmission material or workmanship

  NOTE: This warranty is void on transmissions used in vehicles currently or previously titled as salvaged, scrapped, junked, or totaled.

- **CHASSIS, BODY, and COMPONENTS** — The chassis and body company (assemblers) and other component and equipment manufacturers are solely responsible for warranties on the chassis, body, component(s), and equipment they provide. Any transmission repair caused by an alteration(s) made to the Allison transmission or the vehicle which allows the transmission to be installed or operated outside of the limits defined in the appropriate Allison Installation Guideline is solely the responsibility of the entity making the alteration(s).

- **DAMAGE CAUSED by LACK of MAINTENANCE or by the USE of TRANSMISSION FLUIDS NOT RECOMMENDED in the OPERATOR'S MANUAL** — Defects and damage caused by any of the following are not covered:
  - Failure to follow the recommendations of the maintenance schedule intervals applicable to the transmission;
  - Failure to use transmission fluids or maintain transmission fluid levels recommended in the Operator's Manual.

- **MAINTENANCE** — Normal maintenance (such as replacement of filters, screens, and transmission fluid) is not covered and is the owner's responsibility.

- **REPAIRS by UNAUTHORIZED DEALERS** — Defects and damage caused by a service outlet that is not an authorized Allison Transmission Distributor or Dealer are not covered.

- **USE of OTHER THAN GENUINE ALLISON TRANSMISSION PARTS** — Defects and damage caused by the use of parts that are not genuine Allison Transmission parts are not covered.

- **EXTRA EXPENSES** — Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of vehicle use; inconvenience; storage; payment for loss of time or pay; vehicle rental expense; lodging; meals; or other travel costs.

- **"DENIED PARTY" OWNERSHIP** — Warranty repair parts and labor costs are not reimbursed to any participating or non-participating OEMs, dealers or distributors who perform warranty work for, or on behalf of, end users identified by the United States as being a "denied party" or who are citizens of sanctioned or embargoed countries as defined by the U.S. Department of Treasury Office of Foreign Assets Control. Furthermore, warranty reimbursements are not guaranteed if the reimbursement would be contrary to any United States export control laws or regulations as defined by the U.S. Department of Commerce, the U.S. Department of State, or the U.S. Department of Treasury.

OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED by the MAGNUSON-MOSS WARRANTY ACT

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.
Allison Transmission does not authorize any person to create for it any other obligation or liability in connection with these transmissions.
ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST WAGES OR VEHICLE RENTAL EXPENSES) RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.**

** Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

OTHER TERMS APPLICABLE TO OTHER END-USERS

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE ALLISON TRANSMISSION MODELS LISTED ABOVE AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLISON TRANSMISSION DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH TRANSMISSIONS. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

QUESTIONS

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact any Allison Transmission Distributor or Dealer or write to:

Allison Transmission, Inc.
P.O. Box 894
Indianapolis, IN 46206-0894
Attention: Warranty Administration PF-9

Form SE0614EN (201112)

Cummins Bus Travel Or Towing Extended Coverage Plan

Coverage

Cummins Bus Extended Coverage Plan (Plan) is available to be purchased for all eligible Cummins Engines used in automotive applications marketed for use anywhere in the world under the trademark "Cummins", "Cummins ReCon®", or "Cummins Westport". This Plan covers any failure of the Engine, under normal use and service, which results from a defect in material or factory workmanship (Covered Failure).

Fail Code	Covered Component	Fail Code	Covered Component
DA	Accessory Drive	FL	Fuel Lines
BA	Balancer	BG	Gear Cover
KC	Base Engine Cooling System	BD	Gear Housing
BC	Camshaft	IH	Intake Heater
BN	Connecting Rod	IN	Intake System
EDCB	Coolant Level Sensor	PL	Lift Pump
BB	Crankcase	BL	Liner
BS	Crankshaft	LS	Lubricating System
BK	Cylinder Block	LC	Lubricating Oil Cooler
CH	Cylinder Head	LN	Lubricating Oil Pan
KV	EGR & Variable Geometry Turbocharger Coolant Plumbing	LP	Lubricating Oil Pump
EU	Electronic Engine Controls	EDOB	Oil Level Sensor
SQ	Engine Brakes Exhaust Assembly	BP	Piston
EI	Engine Control Module	BR	Piston Ring
EQPE*	ECM Calibration	EYPB	Position Sensor
IE	Exhaust System	EA	Pressure Sensor
IR	Exhaust System	RA	Rocker Lever Assembly
SN	Flywheel Housing	EL	Speed and Position Sensor
SMFS	Front Engine Mount	ET	Temperature Sensor
BM	Front and Rear Crank Seals	RC	Valve Tappet Assembly

*This plan covers ECM Calibrations only and does not cover adjustable features/parameters, SC or DO options.

This Plan begins on the expiration of the Cummins Base Engine Warranty applicable to the Engine. Coverage ends at the time, miles (kilometers) or hours specified on the accompanying Certificate, whichever occurs first, **AS MEASURED FROM THE CUMMINS BASE ENGINE WARRANTY START DATE.**

Cummins Responsibilities

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Covered Failure.

Cummins will pay for the lubricating oil, antifreeze, diesel exhaust fluid, filter elements and other maintenance items that are not reusable due to a Covered Failure.

Cummins will pay reasonable labor costs for Engine removal and reinstallation when necessary to repair a Covered Failure.

Cummins will pay reasonable costs for towing a vehicle disabled by a Covered Failure to the nearest authorized repair location. In lieu of towing expenses, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging, when the repair is performed at the site of the failure.

Owner Responsibilities

Owner is responsible for operation and maintenance of the Engine as specified in the applicable Cummins Operation and Maintenance Manual. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of this Coverage, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Covered Failure and make the Engine available for repair by such facility. Owner is also responsible for delivering the Engine to the repair facility. Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items provided during covered repairs unless such items are not reusable due to the Covered Failure.

Owner is responsible for communicating expenses, meals, lodging and similar costs incurred as a result of a Covered Failure.

Owner is responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Covered Failure.

Owner is responsible for the cost to investigate complaints, unless the failure is caused by a defect in Cummins material or factory workmanship.

Limitations

Engines with an emissions certification listed below must be operated using only diesel fuel having no more than the corresponding maximum sulfur content. Failure to use the specified fuel as listed in the Cummins Fuel Bulletin #3379001 Table 1 (Cummins Inc. Required Diesel Fuel Specifications) can damage the Engine and aftertreatment system within a short period of time. This damage could cause the Engine to become inoperable and failures attributable to the use of incorrect fuels will be denied Warranty Coverage. Fuel specifications also need to comply with local fuel regulations (EN590 for Europe and ASTM D975 for North America) for Warranty eligibility.

Maximum sulfur levels by emissions certification level as listed on the Engine's dataplate are:

EPA 2007/2010/2013/2017	max. 15 parts per million
EPA Tier 4 Interim / Final	max. 15 parts per million
EU Stage IV 2011	max. 15 parts per million
Euro 4/5	max. 50 parts per million
Euro 6	max. 10 parts per million

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine. Cummins is also not responsible for failures caused by incorrect oil or fuel, or by water, diesel exhaust fluid, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Aftertreatment components are not covered by this Plan.

This Plan does not apply to accessories supplied by Cummins which bear the name of another company. Such non-warranted accessories include, but are not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, steering pumps, non-Cummins fan drives, Engine compression brakes and air compressors.

Cummins branded alternators and starters are not covered by this Plan.

This Plan does not apply to maintenance components, including, but not limited to: fuel injectors, fuel pump, STC hydraulic tappets, STC oil control valve, fuel control valve, low pressure fuel regulator, throttle plate actuator, spark plugs, spark plug boots, ignition coils, ignition control module, turbocharger, air compressor, fan clutch, water pump, fan hub, fan idler pulley assembly, vibration damper, belts, hoses, belt tensioner and thermostat.

Parts used to repair a Covered Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Covered Failure under this Plan assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

This Plan is transferable to subsequent Owners of the Engine by notifying a Cummins Distributor within 90 days of the transfer of ownership.

This Plan does not duplicate other Coverage applicable to the Engine.

Fees paid for this Plan are not refundable.

CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

EXCEPT FOR THE PUBLISHED CUMMINS ENGINE WARRANTY APPLICABLE TO THE ENGINE, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Coverage I.D.: TEC, WBT

Cummins Inc.
Box 3005
Columbus, IN 47202-3005
U.S.A.

Bulletin 3381470 Printed in U.S.A. Rev. 5/17

Cummins Warranty

All Engines Worldwide All Bus (Except U.S./Canada Diesel Powered School Buses)

Coverage

Products Warranted
This Warranty applies to new diesel, LPG, compressed or liquid natural gas fueled Engines sold by Cummins and delivered to the first user on or after January 1, 1999, that are used in all bus categories Worldwide (except U.S./ Canada diesel powered school buses).

Base Engine Warranty
The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and ends two years after the date of delivery of the Engine to the first user.

Engine aftertreatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under the Base Engine Warranty.

Extended Major Components Warranty
The Extended Major Components Warranty applies to all Engines except B and ISB Series Engines and covers Warrantable Failures of the Engine cylinder block, camshaft, crankshaft, connecting rods and Cummins fan clutch (Covered Parts).

Bushing and bearing failures are not covered.

This Coverage begins with the expiration of the Base Engine Warranty and ends three years or 300,000 miles (482,804 kilometers) or 10,800 hours of operation, whichever occurs first, after the date of delivery of the Engine to the first user.

Emission Warranty
Additional Coverage is outlined under the Emission Warranty.

These Warranties are made to all Owners in the chain of distribution and Coverage continues to all subsequent Owners until the end of the periods of Coverage.

Cummins Responsibilities

During The Base Engine Warranty
Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure.

Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure.

Cummins will pay reasonable cost for towing a disabled vehicle, or where mandated by local legislation, to the nearest authorized repair location when caused by a Warrantable Failure. In lieu of towing expense due to a Warrantable Failure, Cummins will pay reasonable cost for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging, when the repair is performed at the site of the failure.

During The Extended Major Components Warranty
Cummins will pay for the repair or, at its option, replacement of the defective Covered Part and any Covered Part damaged by a Warrantable Failure of the defective Covered Part.

Owner Responsibilities

During The Base Engine Warranty
Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items replaced during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

During The Extended Major Components Warranty
Owner is responsible for the cost of all labor needed to repair the Engine, including the labor to remove and reinstall the Engine. When Cummins elects to repair a part instead of replacing it, Owner is not responsible for the labor needed to repair the part.

Owner is responsible for the cost of all parts required for the repair except for the defective Covered Part and any Covered Part damaged by a Warrantable Failure of the defective Covered Part.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items replaced during the repair.

During The Base Engine And Extended Major Components Warranties
Owner is responsible for the operation and maintenance of the Engine as specified in the applicable Cummins Operation and Maintenance Manuals. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure during the Base Engine Warranty, the Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, fines, cargo damage, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

Limitations

Engines with an emissions certification listed below must be operated using only diesel fuel having no more than the corresponding maximum sulfur content. Failure to use the specified fuel as listed in the Cummins Fuel Bulletin #3379001 Table 1 (Cummins Inc. Required Diesel Fuel Specifications) can damage the Engine and aftertreatment system within a short period of time. This damage could cause the Engine to become inoperable and failures attributable to the use of incorrect fuels will be denied Warranty Coverage. Fuel specifications also need to comply with local fuel regulations (EN590 for Europe and ASTM D975 for North America) for Warranty eligibility.

Maximum sulfur levels by emissions certification level as listed on the Engine's dataplate are:

EPA 2007/2010/2013/2017/2021	max. 15 parts per million
EPA Tier 4 Interim / Final / Stage V in North America	max. 15 parts per million
EU Stage IIIB 2011	max. 15 parts per million
EU Stage IV 2011	max. 15 parts per million
EU Stage V	max. 10 parts per million
Euro 4/5	max. 50 parts per million
Euro 6	max. 10 parts per million

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment system could negatively effect emissions certification and void the Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Excessive oil consumption for B Series Engines is covered for the duration of the Coverage or 100,000 miles (160,935 kilometers) or 7,000 hours from the date of delivery of the Engine to the first user, whichever of the three occurs first. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are covered for the first year from the date of delivery of the Engine to the first user.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

Cummins Inc. reserves the right to interrogate Electronic Control Module (ECM) data for purposes of failure analysis.

CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THESE WARRANTIES AND THE EMISSION WARRANTY SET FORTH HEREINAFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country.

Emission Warranty

Products Warranted

This Emission Warranty applies to new diesel, LPG, compressed or liquid natural gas fueled Engines marketed by Cummins that are used in the United States* or Canada in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the first user on or after January 1, 1999.

Coverage

Cummins warrants to the first user and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or 100,000 miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the first user, or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

Limitations

Engines with an emissions certification listed below must be operated using only diesel fuel having no more than the corresponding maximum sulfur content. Failure to use the specified fuel as listed in the Cummins Fuel Bulletin #3379001 Table 1 (Cummins Inc. Required Diesel Fuel Specifications) can damage the Engine and aftertreatment system within a short period of time. This

damage could cause the Engine to become inoperable and failures attributable to the use of incorrect fuels will be denied Warranty Coverage. Fuel specifications also need to comply with local fuel regulations (EN590 for Europe and ASTM D975 for North America) for Warranty eligibility.

Maximum sulfur levels by emissions certification level as listed on the Engine's dataplate are:

EPA 2007/2010/2013/2017/2021	max. 15 parts per million
EPA Tier 4 Interim / Final / Stage V in North America	max. 15 parts per million
EU Stage IIIB 2011	max. 15 parts per million
EU Stage IV 2011	max. 15 parts per million
EU Stage V	max. 10 parts per million
Euro 4/5	max. 50 parts per million
Euro 6	max. 10 parts per million

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment system could negatively effect emissions certification and void the Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

* United States includes American Samoa, the Commonwealth of Northern Mariana Islands, Guam, Puerto Rico and the U.S. Virgin Islands.

Cummins Inc.
Box 3005
Columbus, IN 47202-3005
U.S.A.

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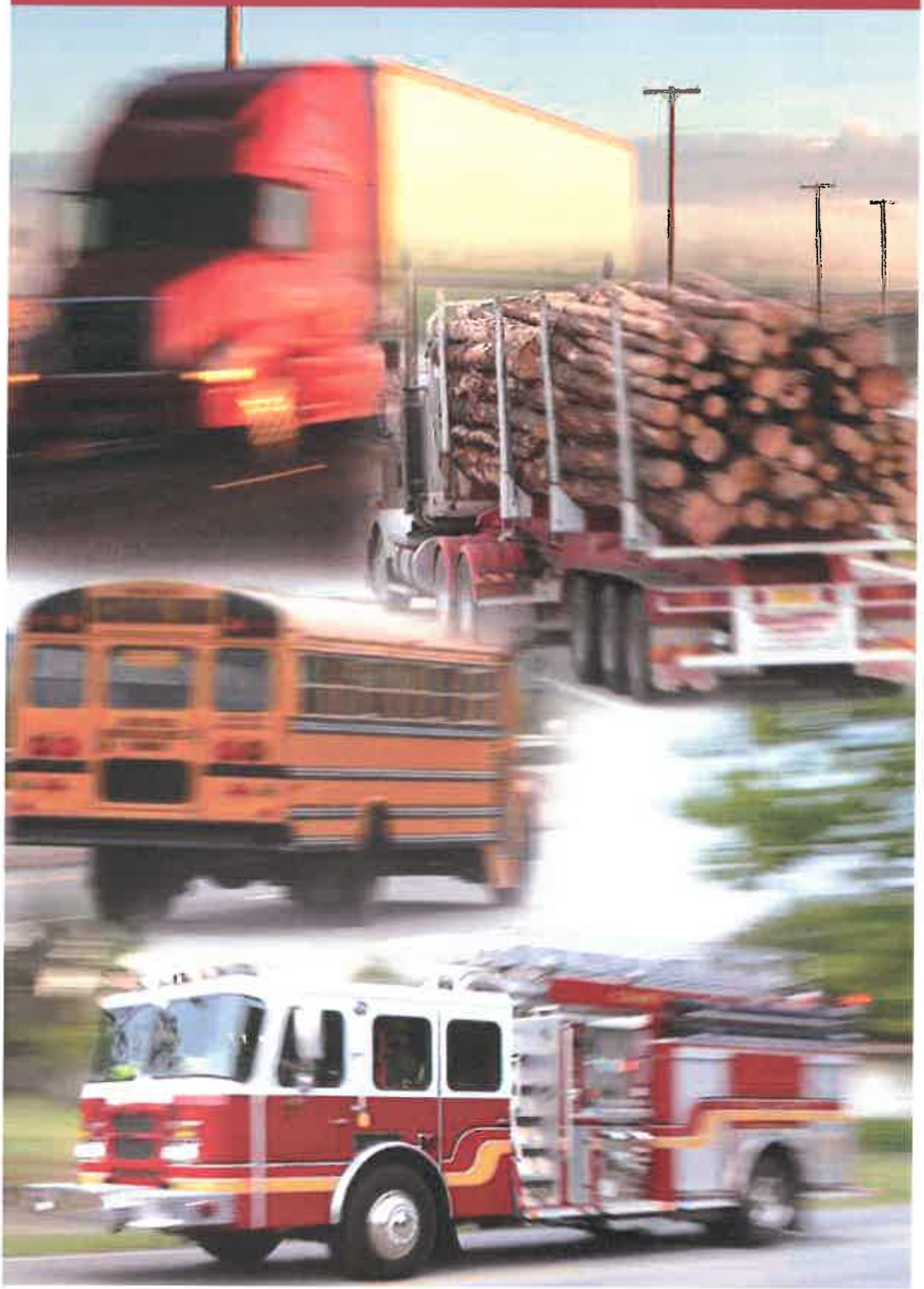
MERITOR® COMMERCIAL VEHICLE SYSTEMS

WARRANTY/MODEL YEAR 2019 VEHICLES

MERITOR



WARRANTY INFORMATION CONTENTS

Effective Model Year 2019 Vehicles

How to Read Warranty Coverage

Number of Years	Mileage (in thousands) Unl=Unlimited	P=Parts Only P&L=Parts & Labor

Notice:

Models or components that are approved for use by Meritor's vocational guidelines contained in Meritor Publication TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, which are not specifically listed, are warranted for one year, unlimited miles, parts only (1/Unl/P).

Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

Advantage Program

Purchasing additional coverage on select components will continue to safeguard your investment against major repair costs after the initial base coverage expires. You can find out more about the Advantage Program by visiting www.meritor.com or by contacting Meritor at 866-OnTrac1 (866-668-7221).

LINEHAUL WARRANTY INFORMATION

Linehaul Vehicles

- Auto Hauler
- Bulk Hauler
- Chip Hauler (Truck)*
- Doubles
- Flatbed
- General Freight
- Grain Hauler
- Livestock Hauler
- Moving Van
- Pipe Hauler
- Refrigerated Freight
- Tanker
- Triples

* Chip Hauler vehicles require specific axle models listed below and Linehaul condition to be eligible for Linehaul warranty consideration.

Linehaul Typically Is

- High mileage operation (over 60,000 miles/year)
- Well maintained major highways of concrete or asphalt construction
- Greater than 30 miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Non-Drive Steer Axles – 5/750/P&L

FD-965	FF-967	MFS-12-122B-N	MFS-12-132C-N	MFS-13-122B-N	MFS-13B-122C-N
FF-941	FG-941	MFS-12-122C-N	MFS-12E-132B-N	MFS-13-122C-N	MFS-13B-132B-N
FF-942	FG-943	MFS-12E-122A-N	MFS-12E-132C-N	MFS-13-132B-N	MFS-13B-132C-N
FF-943	MFS-10-122A	MFS-12E-122B-N	MFS-12-143A-N	MFS-13-132C-N	MFS-14-122A-N
FF-944	MFS-10-143A-N	MFS-12E-122C-N	MFS-12E-143A-N	MFS-13-143A-N	MFS-14-124A-N
FF-961	MFS-10-144A-N	MFS-12-124A-N	MFS-12-144A-N	MFS-13-144A-N	MFS-14-143A-N
FF-966	MFS-12-122A-N	MFS-12-132B-N	MFS-13-122A-N	MFS-13B-122B-N	MFS-14-144A-N

Rear Drive Single Axles – 5/750/P&L

RS-19-144/145/A	RS-21-145	RS-23-160
MS-19-14X	RS-21-160	RS-23-161
MS-21-144	MS-23-17X	RS-23-186

Rear Drive Tandem/Tridem Axles – 5/750/P&L

RT-34-144/P/A	MA-40-165	MT-40-144/P
RT-40-145/A	MA-40-175	MT-40-943
RT-40-160/P[1,2]	MT-34-14X/P	MT-40-943-SP
RT-46-160/P[1,2]	MT-40-14X/P	RZ-166[2]
RT-46-164EH/P[1,2]	MT-40-14X/P	RZ-188
RT-50-160/P[1,2]	MT-40-14XHE	

Drivelines

RPL	5/500/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

[1] These models required for Chip Hauler and Linehaul warranty consideration.
[2] Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

LINEHAUL WARRANTY INFORMATION

Brake Components

Cam Q Series Trailer Brakes	5/500/P, 1/100/L
LX500 Feature[1]	5/750/P&L
Q+ Drum Brake™	5/500/P, 1/Unl/P&L
ASA	5/500/P, 1/Unl/P&L
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™[2]	12-Years or Wearable Life/P
EX+ Air Disc Brake™	5/500/P, 1/Unl/L
EX+ Air Disc Brake Extended Standard Warranty[3]	5/500/P&L

[1] Includes: bushing, seal, cam, ASA lubrication and wear coverage of 3/500/P&L.
[2] Based on stamped wear diameter max.
[3] Applies only to MA761 friction material code CD brake assembly i.e. EX225LXXXCDXXX

Trailer Axles

Beam and Brackets	5/500/P, 1/100/L
Wheel End Systems[1]	
Standard System[2]	1/100/P&L
PreSet by Meritor[3]	5/500/P&L
AxlePak5[4]	5P/L
AxlePak7[5]	7P/L

[1] Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.
[2] When installed by Meritor.
[3] Requires approved hubcap stating PreSet by Meritor on hubcap face.
[4] When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/Unl/P, 1/Unl/L.
[5] When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/Unl/P, 1/Unl/L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

TAG/Pusher Axles[1]

TQ, TQD, TR, TRD Beam and Brackets	5/750/P&L

[1] For brake components and ABS Coverage, refer to appropriate product warranties.

Meritor Tire Inflation System by PSI

MTIS Components	5/Unl/P, 1/Unl/L

Trailer Air Suspension Systems

MPA38/40 (Tandem Axle Parallelogram)[1]	
Major Structural Components	5/500/P, 1/100/L
Curbing Damage Warranty[2]	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/100/P&L
PinLoc Actuator	3/300/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs	2/200/P, 1/100/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/500/P, 1/100/L
Height Control Valve	1/100/P&L
Shock Absorbers	2/200/P&L
Air Springs & Rebound Straps	2/200/P, 1/100/L
Bushings	5/500/P, 3/300/L

[1] Fastener torque coverage is limited to 2/Unl/P&L when torqued by Meritor
(For axle and ABS coverage, refer to appropriate product warranties.)

[2] "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.

GENERAL SERVICE WARRANTY INFORMATION

General Service Vehicles

- Auto Hauler
- Beverage Truck
- Chip Hauler
- Cross Country Coach
- Flatbed
- Front Engine Commercial Chassis
- Front Engine Integral Coach
- General Freight
- Intercity Coach
- Intermodal Chassis
- Livestock Hauler
- Meat Packer
- Moving Van
- Municipal Truck
- Newspaper Delivery
- Pick-Up and Delivery
- Pipe Hauler
- Platform Auto Hauler
- Rear Engine Integral Coach
- Recreational Vehicles
- Refrigerated Freight
- School Bus
- Stake Truck
- Tanker
- Tanker Trailer
- Tour Bus
- Wrecker

General Service Typically Is

- Lower mileage operations (less than 60,000 miles/year)
- Generally, on-road service (less than 10% off-road)
- An average of three (3) miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FL-941	MFS-8-153B-N	MFS-12-132B-N	MFS-13-132B-N	MFS-16-135A-N
FF-941	FL-943	MFS-8-163B-N	MFS-12E-132B-N	MFS-13-132C-N	MFS-16-143A-N
FF-942	MFS-6-151A-N	MFS-10-122A	MFS-12-132C-N	MFS-13B-132B-N	MFS-18-133A-N
FF-943	MFS-6-153B-N	MFS-10-143A-N	MFS-12E-132C-N	MFS-13B-132C-N	MFS-18-135A-N
FF-944	MFS-6-162B-N	MFS-10-144A-N	MFS-12-143A-N	MFS-13-143A-N	MFS-18-193A-N
FF-946	MFS-6-153C-N	MFS-12-122A-N	MFS-12-144A-N	MFS-13-144A-N	MFS-20-133A-N
FF-961	MFS-6-162C-N	MFS-12E-122A-N	MFS-12E-143A-N	MFS-14-122A-N	MFS-20-135A-N
FF-966	MFS-7-113C-N	MFS-12-122B-N	MFS-13-122A-N	MFS-14-124A-N	MFS-20-193A-N
FF-967	MFS-7-153C-N	MFS-12E-122B-N	MFS-13-122B-N	MFS-14-143A-N	MFS-22-135A-N
FG-941	MFS-7-163C-N	MFS-12-122C-N	MFS-13B-122B-N	MFS-14-144A-N	MFS-22H-135A-N
FH-941	MFS-8-113B-N	MFS-12E-122C-N	MFS-13-122C-N	MFS-16-122A-N	MFS-22-193A-N
FH-946[1]	MFS-8-143A-N	MFS-12-124A-N	MFS-13B-122C-N	MFS-16-133A-N	MFS-22H-193A-N

[1] Can also be used with reduced steer angles in tag position in Coach Applications.

Front Drive/Non-Drive Steer Axles – 1/Unl/P&L

FFNS-2200	FSD-12A	FSD-23A
FFNS-2300	FSD-13A	FSD-29A
FSD-08A	FSD-14A	SDA-1800
FSD-081	FSD-16A	SDA-2100
FSD-010A	FSD-20A	SDA-2300

Rear Drive Single Axles – 2/Unl/P&L

MS-17-13X	MS-21-14X	RC-23-160	RS-24-160	MS-30-616-SP
MS-17-14X	MS-21-144	RC-23-161	RC-25-160	RS-35-380
MS-19-13X	MS-23-17X	RC-23-162[1]	RS-26-185	71162
MS-19-14X	RS-21-145/A	RC-23-165[1]	MS-26-616	71163
RS-17-144/145/A	RS-21-160	RS-23-160	MS-26-616-SP	79163
RS-19-144/145/A	RC-22-145	RS-23-161	RS-30-185	
MS-21-13X	RC-22-145/A	RS-23-186	MS-30-616	

[1] 3/Unl/P&L if PreSet by Meritor.

Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	RT-40-145/A	RT-52-185[1]
RT-34-144/P/A	MT-44-14X/P	MT-58-616
MT-40-14X/P	RT-44-145/P	RT-58-185[1]
MT-40-14XHE	RT-46-169	MT-70-380
MT-40-144/P	MT-52-616	RZ-188

[1] Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Rear Drive Tandem/Tridem - 3/Unl/P&L

RT-40-160/P	RT-50-160/P
RT-46-160/P	RZ-166
RT-46-164EH/P	

Rear Drive Axles – 1/Unl/P&L

11170	RND-14H
523	RND-16A

Drivelines

RPL	4/400/P, 1/Unl/P&L
MXL	3/350/P, 1/Unl/P&L
155N	1/Unl/P
92N	1/Unl/P

Transmission – 1/Unl/P&L

516 FAT 30

PTO – 1/Unl/P&L

318	526	PTO-1702
500	531	PTO-175
510	543	PTO-185
518	PTO-170	PTO-190

GENERAL SERVICE WARRANTY INFORMATION

Brake Components

Cam Q Series Trailer Brakes	3/Unl/P, 1/Unl/L
LX500 Feature[1]	3/Unl/P&L
Cam P[3]	2/200/P
Cam	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake ™[3]	2/200/P&L
ASA	3/Unl/P
ASA[3]	2/200/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
STEELite X30 Drum Brake™[2]	12-Years or Wearable Life/P
EX+ Air Disc Brake™	2/Unl/P&L

[1] Includes: bushing, seal, cam, ASA lubrication and wear coverage of 1/Unl/P.
[2] Based on stamped wear diameter max.
[3] Applies to Tour Bus and Cross Country Coach only.

Trailer Axles

Beam and Brackets[1]	5/Unl/P, 1/Unl/L
Wheel End Systems[2]	
Standard System[3]	1/Unl/P&L
AxlePak5[4]	5/P&L
AxlePak7[5]	7/P&L

[1] 9000 Series is 3/Unl/P, 1/Unl/L
[2] Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.
[3] When installed by Meritor.
[4] When specified with AxlePak5 wheel end system, coverage on MTIS thru-tee and stator is 5/Unl/P, 1/Unl/L.
[5] When specified with AxlePak7 wheel end system, coverage on MTIS thru-tee and stator is 7/Unl/P, 1/Unl/L.

(For brake components and ABS coverage, refer to appropriate product warranties.)

Chassis Axles (2000 Series/ChassiPak)

Beam & Brackets	6/Unl/P, 1/Unl/L
Wheel End Systems[1]	
Standard System	1/Unl/P&L
AxlePak7	7/P&L
Beam and Brackets	7/P, 1/L

[1] Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.

Trailer Air Suspension Systems

MPA38/40 (Tandem Axle Parallelogram)[1]	
Major Structural Components	5/Unl/P, 1/Unl/L
Curbing Damage Warranty[2]	5/500/P, 1/100/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
PinLoc Air Controls	1/Unl/P&L
PinLoc Air Actuator	3/Unl/P&L
MPA20 (Single Axle Parallelogram)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings	7/700/P, 5/500/L
MTA (Trailing Arm)	
Major Structural Components	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs and Rebound Straps	2/Unl/P, 1/Unl/L
Bushings[3]	5/Unl/P, 3/Unl/L

(For axle and ABS coverage, refer to appropriate product warranties.)
[1] Fastener torque coverage is limited to 2/Unl/P&L when torqued by Meritor
[2] "Curbing damage" is defined as deformation (bending, buckling, or breakage), caused by sudden impact with a curb or similar fixed object. Damage to the RideSentry slider box (the suspension sliding subframe, consisting of the frame rails, crossmembers, and central A-frame assembly), caused by accidental trailer impact with a curb or similar fixed object, is eligible for warranty coverage. Damage to other components or damage resulting from collision with another vehicle, rollover or fire is not covered under this provision. Warranty is not transferrable to another trailer VIN, and coverage does not apply if the trailer is deemed to be a total loss, scrapped, or otherwise not salvageable.
[3] Raw wood applications 3/Unl/P, 1/Unl/L

TAG/Pusher Axles

TQ, TQD, TR, TRD Beam and Brackets[1]	3/Unl/P, 1/Unl/L
MC14002, MC16003, FH946	2/Unl/P&L

(For brake components and ABS coverage, refer to appropriate product warranties.)
[1] 3/Unl/P&L if sold with PreSet by Meritor.

Meritor® Tire Inflation System by PSI

MTIS Components	5/Unl/P, 1/Unl/L

HEAVY SERVICE WARRANTY INFORMATION

Heavy Service Vehicles

- Airport Rescue Fire Fighting (ARFF)
- Airport Shuttle*
- Asphalt Truck
- Block Truck
- Bottom Dump Trailer Combination
- Cementing Vehicle
- Commercial Pick-Up
- Concrete Pumper
- Construction Material Hauler
- Mixer
- Demolition
- Drill Rig
- Dump
- Equipment Hauling
- Flatbed Trailer Hauler
- Flatbed Truck
- Fracturing Truck
- Front Loader
- Geophysical Exploration
- Hopper Trailer Combinations
- Landscaping Truck
- Liquid Waste Hauler
- Log Hauling
- Lowboy
- Michigan Special Gravel Trains
- Michigan Special Log Hauler
- Michigan Special Steel Hauler
- Michigan Special Waste Vehicle
- Municipal Dump
- Rear Loader (Refuse)
- Recycling Truck
- Residential Pick-Up (Refuse)
- Rigging Truck
- Roll-Off
- Scrap Truck
- Semi-End Dump
- Sewer/Septic Vacuum
- Shuttle Bus*
- Side Loader
- Snowplow/Snowblower
- Steel Hauling
- Tanker
- Tank Truck
- Tractors with Pole Trailers
- Tractor/Trailer with Jeeps
- Transfer Dump
- Transfer Vehicle
- Utility Truck
- Winch Truck

*Commercial chassis only

Heavy Service Typically Is

- Moderate mileage operation (less than 60,000 miles per year)
- On/Off road vocations (10% or more off-road)
- Moderate to frequent stops/starts (up to 10 stops per mile)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Drive/Non-Drive Steer Axles – 2/Unl/P&L

FD-965	FL-941	MFS-10-143A-N	MFS-12-143A-N	MFS-13-144A-N	MFS-18-193A-N	MX-12-120 EVO
FF-941	FL-943	MFS-10-144A-N	MFS-12-144A-N	MFS-13-155	MFS-20-133A-N	MX-14-120
FF-942	MFS-6-151A-N	MFS-12-122	MFS-12-155	MFS-14-122	MFS-20-135A-N	MX-16-120
FF-943	MFS-6-153B	MFS-12E-122	MFS-13-122	MFS-14-124A-N	MFS-20-193A-N	MX-18-120
FF-944	MFS-6-162B	MFS-12-122B-N	MFS-13-122B-N	MFS-14-143A-N	MFS-22-135A-N	MX-17-140
FF-946	MFS-6-162C	MFS-12E-122B-N	MFS-13B-122B-N	MFS-14-144A-N	MFS-22H-135A-N	MX-19-140
FF-961	MFS-7-113C-N	MFS-12-122C-N	MFS-13-122C-N	MFS-16-122A-N	MFS-22-193A-N	MX-21-140
FF-966	MFS-7-153C-N	MFS-12E-122C-N	MFS-13B-122C-N	MFS-16-133A-N	MFS-22H-193A-N	MX-21-160
FF-967	MFS-7-163C-N	MFS-12-124A-N	MFS-13-132B-N	MFS-16-135A-N	RF-16-145	MX-23-160
FG-941	MFS-8-113B-N	MFS-12-132B-N	MFS-13B-132B-N	MFS-16-143A-N	RF-21-160	MX-810
FG-943	MFS-8-153B-N	MFS-12E-132B-N	MFS-13-132C-N	MFS-18-133A-N	MX-10-120	
FH-941	MFS-8-163B-N	MFS-12-132C-N	MFS-13B-132C-N	MFS-18-135A-N	MX-10-120 EVO	
FH-946	MFS-10-122A	MFS-12E-132C-N	MFS-13-143A-N	MFS-18-192A-N	MX-12-120	

Front Drive/Non-Drive Steer Axles – 1/Unl/P&L

FFNS-2200	FSD-12A	FSD-23A
FFNS-2300	FSD-13A	FSD-29A
FSD-08A	FSD-14A	SDA-1800
FSD-081	FSD-16A	SDA-2100
FSD-010A	FSD-20A	SDA-2300

Rear Drive Single Axles – 2/Unl/P&L

MS-17-14X	RS-21-160	RS-24-160	MS-35-380
RS-17-144/145/A	RC-22-145	RS-25-160	RS-38-380
MS-19-14X	RC-23-160	MS-26-616	RC-25-160
RS-19-144	RH-23-160	MS-26-616-SP	RC-26-633
MS-21-114	RS-23-160	RS-26-185/380	MT-58-616
MS-21-14X	RC-23-161	MS-30-616	MT-58-616-SP
RS-21-145	RS-23-161	MS-30-616-SP	
RS-21-145/A	RS-23-186/380	RS-30-185/380	

Rear Drive Axles – 1/Unl/P&L

11170	RND-14H
523	RND-16A

Drivelines

RPL	3/Unl/P, 1/Unl/P&L
92N	1/Unl/P&L
MXL	1/Unl/P&L

Transmission – 1/Unl/P&L

516
FAT 30

PTO – 1/Unl/P&L

318	526	PTO-1702
500	531	PTO-175
510	543	PTO-185
518	PTO-170	PTO-190

HEAVY SERVICE WARRANTY INFORMATION

Rear Drive Tandem/Tridem Axles – 2/Unl/P&L

MT-34-14X/P	RT-44-145/P	MT-58-616	RZ-188
RT-34-144/P/A	RT-46-169	MT-58-616-SP	
MT-40-14X/P	MT-52-616	RT-58-185/380[1,2]	
RT-40-145/A	MT-52-616-SP	RT-70-380	
MT-44-14X/P	RT-52-185/380[1,2]	MT-70-380	

[1] Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.
[2] Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Brake Components

Cam P	3/Unl/P
Cam P[3]	2/100/P
Cam Cast Plus™	2/100/P&L
Q+ Drum Brake™	3/Unl/P&L
Q+ Drum Brake™[2]	2/100/P&L
ASA	3/Unl/P
ASA[2]	2/100/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
EX+ Air Disc Brake	2/100/P&L

[1] Based on stamped wear diameter max.
[2] Applies to City Bus, Trolley, Shuttle Bus and Airport Shuttle only.
[3] Warranty for all non-Meritor ASAs supplied by Meritor for all Heavy Service vocations is 1/100/P.

Rear Drive Tandem/Tridem - 3/Unl/P&L

RT-40-160/P/A[3]
RT-46-160/P/A[1,3]
RT-46-164EH/P/A[2,3]
RT-50-160/P/A[3]
RZ-166

[1] U.S. only. Canadian warranty = 1/Unl/P for combination vehicles only.
[2] Axle model designated will vary according to options and variations specified on these axles. Contact Meritor Axle Applications Engineering for details.
[3] Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Meritor Tire Inflation System by PSI

MTIS Components	5/Unl/P, 1/Unl/L

Trailer Air Suspension Systems

MTA (Trailing Arm)	
Major Structural Components[1]	5/Unl/P, 1/Unl/L
Height Control Valve	1/Unl/P&L
Shock Absorbers	2/Unl/P&L
Air Springs	2/Unl/P, 1/Unl/L
Bushings[1]	5/Unl/P, 3/Unl/L

[1] Raw wood applications 3/Unl/P, 1/Unl/L

(For axle and ABS coverage, refer to appropriate product warranties.)

Trailer Axles

Beam and Brackets[1]	5/Unl/P, 1/Unl/L
Wheel End Systems[2]	
Standard System[3]	1/Unl/P&L

[1] 9000 Series is 3/Unl/P, 1/Unl/L.
[2] Includes hub, wheel seals and wheel bearings—all systems require annual inspections and proper documentation to ensure full coverage.
[3] When installed by Meritor.

(For brake components and ABS coverage, refer to appropriate product warranties.)

Gearboxes – 1/Unl/P&L

240	376	448	506	528	546
279	377	456	514	533	550
279D	378	478	519	534	
280	380	480	520	536	
285	384	487	522	537	
292	402	488	524	541	
314	413	505	527	545	

Transfer Cases – 1/Unl/P

MTC-4208	306	450	490	540	TC-137	TC-200
MTC-4210	315	451	496	548	TC-142	TC-237
MTC-4213	358	461	504	549	TC-143	TC-270
T-2111	379	469	512	555	TC-170	TC-28
T-2119	410	479	525	RB-170	TC-1701	TC-38
11258	419	484	529	RB-180	TC-1702	
245	449	486	538	RTC-50	TC-180	

FIRE AND EMERGENCY WARRANTY INFORMATION

Fire and Emergency Vehicles

- Aerial Ladder Truck
- Aerial Platform
- Ambulance
- Command Vehicle
- Crash Fire Rescue (CFR)
- Pumper
- Rapid Intervention Vehicle (RIV)
- Tanker

Fire and Emergency Typically Is

- Lower mileage operations (less than 20,000 miles/year)
- Generally, on-road service (less than 10% off-road)
- An average of three (3) miles between starting and stopping

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Non-Drive Steer Axles – 5/Unl/P&L

FL-941	MFS-18-193A-N	MFS-22-135A-N
FL-943	MFS-20-133A-N	MFS-22H-135A-N
MFS-18-133A-N	MFS-20-135A-N	MFS-22-193A-N
MFS-18-135A-N	MFS-20-193A-N	MFS-22H-193A-N

Front Drive Steer Axles – 2/Unl/P&L

MX 19140	MX 21160	MX 23810
MX 21140	MX 23160	

Rear Drive Single Axles – 5/Unl/P&L

RC-23-160	RS-23-186	RS-26-185	RS-25-160
RS-23-160	RS-24-160	RS-30-185	
RS-23-161	RC-25-160	RS-35-380	

[1] 3/Unl/P&L if PreSet by Meritor.

Rear Drive Tandem/Tridem Axles – 5/Unl/P&L

MT-40-14X/P	RT-44-145/P	MT-52-616
MT-40-144/P	RT-46-160/P	RT-52-185[1]
RT-40-145/A	RT-46-164EH/P	MT-58-616
RT-40-160/P	RT-46-169	RT-58-185[1]
MT-44-14X/P	RT-50-160/P	MT-70-380

[1] Each vehicle must have a Request for Application Recommendation (RAR) approved by Meritor prior to vehicle build. All RARs must identify the chassis number or VIN. Refer to Product Information Letter #303 and #396 for further details.

Brake Components

Cam	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
ASA	3/Unl/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P
EX+ Air Disc Brake™	2/Unl/P&L

[1] Includes: bushing, seal, cam, ASA lubrication and wear coverage of 1/Unl/P.

Drivelines

RPL	4/400/P, 1/Unl/L
MXL	3/350/P, 1/Unl/L
155N	1/Unl/P
92N	1/Unl/P

Transfer Cases – 1/Unl/P

MTC 4208	T-2111
MTC 4210	T-2119
MTC 4213	

TRANSIT BUS WARRANTY INFORMATION

Transit Bus Vehicles

- Airport Shuttle
- City Bus
- Commuter Coach
- Shuttle Bus
- Transit Bus
- Trolley

Transit Bus Typically Is

- Moderate mileage operation (less than 50,000 miles per year)
- Moderate to frequent stops/starts (up to 10 stops per mile)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Front Drive/Non-Drive Steer Axles – 5/300/P&L

FH-946	MFS-12-155
FH-941[1]	MFS-13-155

[1] Commuter coach only – 2/Unl/P&L

Rear Drive Single Axles – 5/300/P&L

RS-23-160	79163	RS-21-160
RC-23-161	RC-23-162[1]	
71163	RC-23-165[1]	

[1] Commuter coach only – 2/Unl/P&L

Brake Components

Cam Cast Plus™	2/100/P&L
Q+ Drum Brake™[1]	2/100/P&L
ASA[1]	2/100/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
All Other Brakes	1/Unl/P
EX+ Air Disc Brake	2/100/P&L

[1] Applies to City Bus, Trolley, Shuttle Bus and Airport Shuttle only.

Drivelines

RPL	3/Unl/P, 1/Unl/L
92N	1/Unl/P&L
MXL	1/Unl/P&L

Tag Axles – 2/Unl/P&L

MC 14002
MC 16003
FH-946

Center Non-drive Axles – 5/300/P&L

MC26000
71063
79063

OFF-HIGHWAY SERVICE WARRANTY INFORMATION

Industrial And Off-Highway Service Vehicles

- Load-On/Load-Off
- Port Tractor
- Rail Yard Spotter
- Roll-On/Roll-Off
- Stevedoring Tractor
- Trailer Spotter
- Yard Jockey
- All-Terrain Crane
- Rough Terrain Crane
- Forestry
- Material Handling
- Specialized Heavy Haul
- Specialized Mining
- Excavator
- Compactor
- Fertilizer Spreader
- Snow Blower
- Mining
- Rail Car Mover
- Loader
- Tow Tractor
- Pushback Tractor

Industrial And Off-Highway Service Typically Is

- Low mileage operation
- Low speed vehicle speed restriction
- Vehicles are **not** typically licensed for highway use
- Six (6) starts/stops per mile (typical)

Coverage under Meritor's warranty require that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

Drive Steer Axles – 1/Unl/P

MOR	MOX	MOC

Drivelines – 1/Unl/P

RPL	MXL

Front Non-Drive Steer Axles – 1/Unl/P

FF - 941	MFS-13-143A-N	MFS-20-133A-N
FF - 943	MFS-13-144A-N	MFS-20-135A-N
FF - 961	MFS-14-143A-N	MFS-20-193A-N
FF - 966	MFS-16-122A-N	MFS-22-135A-N
FG - 941	MFS-16-133A-N	MFS-22H-135A-N
FG - 943	MFS-16-135A-N	MFS-22-193A-N
FL - 941	MFS-16-143A-N	MFS-22H-193A-N
FL - 943	MFS-18-133A-N	MON-Z0 FAMILY
MFS-12-143A-N	MFS-18-135A-N	
MFS-12-144A-N	MFS-18-193A-N	

Brake Components

Cam P	3/Unl/P
Q+ Drum Brake™	3/Unl/P&L
ASA	3/Unl/P
Hubs/Cast Drums and Other Wheel-end Components	1/Unl/P
Hydraulic Disc Brakes	1/Unl/P
All Other Brakes	1/Unl/P

Planetary Axles – 1/Unl/P

MOR	MOX	MOC	MOT

Rear Drive Single Axles – 1/Unl/P

RS-23-186	RS-24-160-SP	RS-30-185
RS-23-380	MS-30-616	RS-30-380
RS-24-160	MS-30-616-SP	MS-35-380

Rear Drive Tandem Axles – 2/Unl/P

MT-44-14X/P	MT-58-616	RT-44-145/P	RT-50-160/P
MT-52-616	MT-58-616-SP	RT-46-160/P	RZ-166
MT-52-616-SP	MT-70-380	RT-46-164EH/P	

Gearboxes – 1/Unl/P&L

240	376	448	506	528	546
279	377	456	514	533	550
279D	378	478	519	534	
280	380	480	520	536	
285	384	487	522	537	
292	402	488	524	541	
314	413	505	527	545	

Transfer Cases – 1/Unl/P

MTC-4208	306	450	490	540	TC-137	TC-200
MTC-4210	315	451	496	548	TC-142	TC-237
MTC-4213	358	461	504	549	TC-143	TC-270
T-2111	379	469	512	555	TC-170	TC-28
T-2119	410	479	525	RB-170	TC-1701	TC-38
11258	419	484	529	RB-180	TC-1702	
245	449	486	538	RTC-50	TC-180	

TERMS AND CONDITIONS

Coverage Exclusions

Product Description

All
The cost of any repairs, replacements or adjustments to a covered component (1) associated with noise; (2) resulting from the use or installation of non-genuine Meritor components or materials; (3) due to vibration associated with improper operation or misapplication of drivetrain components; and (4) damage resulting from corrosion.

For axle assemblies supplied by Meritor with suspension and interface brackets designed and/or attached by non-Meritor parties, Meritor warranty coverage does not apply to the brackets, bracket attachment methods, and field issues caused by brackets or bracket attachments to any covered component unless specified in a separate OEM agreement.

Front Axles
King Pin Bushings.

Rear Axles
Self-contained traction equalizers and oil filters. The use of NoSPIN differentials will result in the exclusion of axle shafts from warranty considerations. NoSPIN is a product of Eaton.

ASA
Boot and bushing. Bent, broken, over-torqued, missing or otherwise damaged pawl assemblies.

Cam Brake
Brake lining wear and brake shoe "rust-jacking."

Disc Brake
Pad wear, rotor wear.

Coverage Limitations

Product Description

All
Any claim beyond 60 days from date of repair will not be accepted or honored under this warranty program. Products purchased on an incomplete vehicle (glider) are limited to one year, unlimited miles parts only (1/Unl/P).

Front Axles
Tie rod and tie rod ends limited to 3-year/300,000-mile or published vocational coverage, whichever is less. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

Rear Axles
Pinion and through shaft seals limited to 3-year/300,000-mile or published vocational coverage, whichever is less, if yoke is installed by Meritor. If yoke is not installed by Meritor, then Meritor does not warrant pinion seals. Wheel seals, gaskets and wheel bearings are covered for 1 year/unlimited miles if the wheel end equipment is supplied and assembled by Meritor.

Rear Axles
The Meritor® breather part number A-2297-C-8765 with A-3196-J-1336 hose must be used for eligibility of any potential warranty consideration relating to contamination and/or loss of lube in axles.

Cam Brake
Limited to bracket, brake spider and camshaft structural integrity.

STEELite X30
Wearable life is up to the discard diameter of the drum.

Disc Brake
Warranty coverage for boots, seals, bushings and pins is 2/200/P. Warranty coverage for pads is 1/100/P.

Warranty coverage on vehicles with 1,850 lb-ft engine torque and over may be reduced on individual drivetrain components. Contact your Meritor representative for specific details.

TERMS AND CONDITIONS

(1) What is Covered by this Commercial Warranty?
Meritor Heavy Vehicle Systems, LLC warrants to the owner ("Owner") that the components listed in this publication, which have been installed by an Original Equipment Manufacturer ("OEM") as original equipment in vehicles licensed for on-highway use, will be free from defects in material and workmanship. This warranty coverage begins only after the expiration of the OEM's vehicle warranty for the applicable covered components. Warranty coverage ends at the expiration of the applicable time period from the date of vehicle purchase by the first Owner, or, the applicable mileage limitation, whichever occurs first. Duration of coverage varies by component and vocation as detailed elsewhere in this warranty statement.

Some components are warranted for parts only and the Owner must pay any labor costs associated with the repair or replacement of the component. Other components are warranted for both parts and reasonable labor to repair or replace the subject component. Components (whether new, used or remanufactured) installed as replacements under this warranty are warranted only for the remainder of the original period of time or mileage under the original warranty.

For certain components, coverage requires the use of specific extended drain interval or synthetic lubricants. For further information about lubrication and maintenance, see Meritor publication Maintenance Manual Number I and the applicable Meritor maintenance manual for the product in question. Other conditions and limitations applicable to this warranty are detailed below.

(2) Designation of Vocational Use Required.
To obtain warranty coverage, each Owner must notify Meritor through the OEM new truck and/or trailer dealer of the intended vocational use of the vehicle into which the Meritor components have been incorporated prior to the vehicle in-service date. This notification may be accomplished by registering the vehicle through your OEM new truck and/or trailer dealer or with Meritor directly. Failure to notify Meritor of (I) the intended vocational use of the vehicle or (II) a change in vocational use from that which was originally designated, will result in the application of a one year, unlimited mileage, parts only warranty (1/Unl/P) from the initial in-service date.

A second Owner and each subsequent Owner must also notify Meritor as to the intended vocational use of the vehicle. This notification can be sent directly to Meritor or through the OEM new truck and/or trailer dealer. The duration and mileage coverage of this warranty cannot exceed the coverage extended to the first Owner after his or her initial designation of vocational use.

Coverage under Meritor's warranty requires that the application of products be properly approved pursuant to OEM and Meritor approvals. Refer to TP-9441 for axles, SP-8320 for trailer axles, TP-12126 for drivelines, and/or contact Meritor regarding specific application approval questions on any product line.

(3) What is the Cost of this Warranty?
There is no charge to the Owner for this warranty.

(4) What is not Covered by this Warranty?
This warranty does not cover normal wear and tear; nor does it cover a component that fails, malfunctions or is damaged as a result of (I) improper installation, adjustment, repair or modification (including the use of unauthorized attachments or changes or modification in the vehicle's configuration, usage, or vocation from that which was originally approved by Meritor), (II) accident, natural disaster, abuse, or improper use (including loading beyond the specified maximum vehicle weight or altering engine power settings to exceed the axle and/or driveline capacity), or (III) improper or insufficient maintenance (including deviation from approved lubricants, change intervals, or lube levels). This warranty does not cover any component or part that is not branded by Meritor. For vehicles that operate full or part time outside of the United States and Canada, a one year, unlimited mileage, parts only warranty (1/Unl/P) will apply.

(5) Remedy.
The exclusive remedy under this warranty shall be the repair or replacement of the defective component at Meritor's option. Meritor reserves the right to require that all applicable failed materials are available and/or returned to Meritor for review and evaluation.

(6) Disclaimer of Warranty.
THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESSED, IMPLIED OR STATUTORY INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

(7) Limitation of Remedies.
In no event shall Meritor be liable for special, incidental, indirect, or consequential damages of any kind or under any legal theory, including, but not limited to, towing, downtime, lost productivity, cargo damage, taxes, or any other losses or costs resulting from a defective covered component.

(8) To Obtain Service.
If the Owner discovers within the applicable coverage period a defect in material or workmanship, the Owner must promptly give notice to either Meritor or the dealer from which the vehicle was purchased. To obtain service, the vehicle must be taken to any participating OEM new truck and/or trailer dealer or authorized Meritor service location. The dealer will inspect the vehicle and contact Meritor for an evaluation of the claim. When authorized by Meritor, the dealer will repair or replace during the term of this warranty any defective Meritor component covered by this warranty.

(9) Entire Agreement.
This is the entire agreement between Meritor and the Owner about warranty and no Meritor employee or dealer is authorized to make any additional warranty on behalf of Meritor. This agreement allocates the responsibilities for component failure between Meritor and the Owner.

MERITOR

Meritor Heavy Vehicle Systems, LLC
2135 West Maple Road
Troy, Michigan 48084 USA

For more information:
call Ontrac at 866-668-7221
or visit meritor.com

Litho in USA, SP-95155
Revised 01-18 (47865/11900)

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 39 Section Title Fleet Defects

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
A fleet defect is defined as the failure of identical parts from identical causes, covered by the warranty and occurring in the warranty period in a proportion of the buses delivered under this contract. For deliveries of 9 buses and under, the fleet defect proportion shall be 50%.

Question/Clarification or Approved Equal:
Approval requested for the deletion of this requirement in its entirety. This procurement is for nine (9) buses. Per the APTA SBPG, the aforementioned clause is specific to orders of 12 or more buses. SBPG states: A Fleet Defect is defined as cumulative failures of twenty-five (25) percent of the same components in the same or similar application in a minimum fleet size of twelve (12) or more buses where such items are covered by warranty. For the purpose of Fleet Defects, each option order shall be treated as a separate bus fleet. Please note that per your specification GPTD plans to order a base order of eleven (11) in groups of four (4), three (3), four (4) which does not meet the minimum requirements as outlined by SBPG.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒ X

Comments:
Optional orders exceed 12 buses. Should total order exceed 12 buses fleet defect clause shall be activated.

GP

Signature of GPTD Official

3/7/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 40 Section Title Scope of Warranty Provisions

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Warranty on new components that have replaced fleet defect components will be equal to the warranty that was originally provided on the defective component.

Question/Clarification or Approved Equal:
Clarification provided that ENC does not have the authority to extend the warranty of components for OEM vendors.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:

GP

Signature of GPTD Official

3/7/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title Warranty Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
The Contractor's warranty service representative will be the single contact for all warranty issues related to any component or subcomponent on the bus. For example, if a component or subcomponent fails during the warranty period (i.e., engine), the District will contact the Contractor, who will then ensure an appropriate and timely response from that component or subcomponent manufacturer. This requirement must be identified in the Contractor's written warranty policy submittal (see Warranty Provisions, Section 34.

Question/Clarification or Approved Equal:
Approval requested for the delegation of warranty claims responsibility for the following component suppliers needs to be passed through:

1. Cummins Engine
2. Allison Transmission
3. Thermo King HVAC
4. Meritor Axles

ENC cannot provide warranty restitution on behalf of the aforementioned major component suppliers as they administer their own warranty. ENC will be responsible for all warranty restitution on the balance of the bus and will work with end users to resolve any warranty matters when local vendors are unable or unwilling to provide necessary support.

GPTD Response:

Approved: ☒ X Denied: ☐ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 34 Section Title Warranty Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
a. Complete Bus
The Proposer will warrant and guarantee that all buses delivered as part of this procurement will be free from defects and related defects for one (1) year or 50,000 miles, whichever comes first, beginning on the date of acceptance of each bus.

Question/Clarification or Approved Equal:
Approval requested for bus warranty of 2 years/50,000 miles which is ENC's standard warranty for the complete bus.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:

Requested warranty is 1 year. Additional Warranty may be proposed but is not required.

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 20 Section Title Signage and Commination

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Interior Displays
The Transit Information Products Model # OBIC T 10P 2L meets these criteria.

Question/Clarification or Approved Equal:
Clarification provided that Transportation Information Products has gone out of business. ENC has reached out to alternative vendors that could duplicate your interior onboard information station. Is this acceptable or does GPTD have a desired replacement? Please advise so adequate pricing can be supplied.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
Strike this item from specification

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 27 Section Title Batteries

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
The battery terminal ends and cables shall be color-coded with red for the primary positive, black for negative, and another color for any intermediate voltage cables.

Question/Clarification or Approved Equal:
Approval requested for the battery terminals and cable shall be color-coded with brown for primary positive, black for negative and red for intermediate voltage cables.

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 19 Section Title Heating Ventilating and Air Conditioning

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Capacity and Performance
The bus shall be parked in direct sunlight with ambient temperature at 100° F and humidity less than 20 percent. There shall be no passengers on board, and the doors shall be closed.

Question/Clarification or Approved Equal:
Clarification Provided on behalf of required HVAC vendor, Thermo King Corp, that Thermo King uses steam pots and electric heaters in the bus for passenger loads. Test results depend on bus configurations/ ductwork, and airflow. The bus cannot be tested while in direct sunlight as specified, as we use a test cell, however sunlight is simulated with indoor lighting. Please approve Thermo King's standard testing procedure.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GP — 3/3/22

Signature of GPTD Official Date

Bus Air Conditioning Compressor and Clutch Specifications

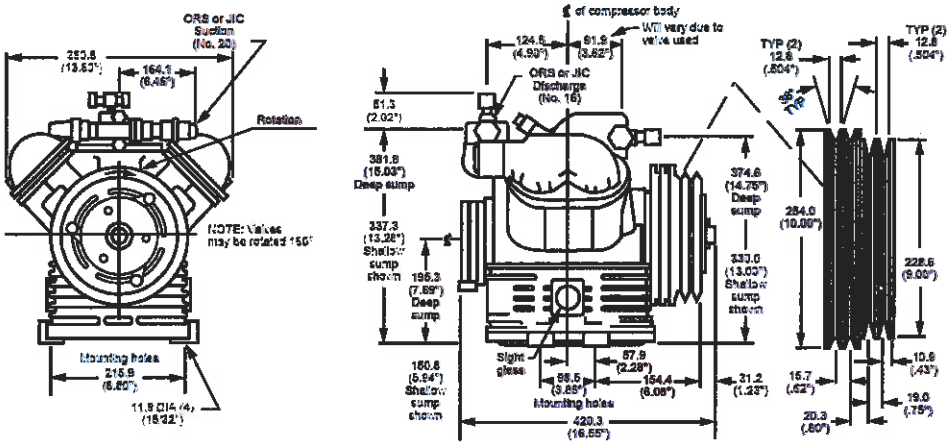
Compressor	Model X426	Model X430
Displacement	426 cu. cm (25.9 cu. in.)	492 cu. cm (30 cu. in.)
Number of cylinders	4	4
Maximum BHP	19 BHP (R-134a) 29 BHP (R-22/R-407C)	19 BHP (R-134a) 29 BHP (R-22/R-407C)
Maximum speed	3,000 rpm (R-134a) 3,000 rpm (R-22/R-407C)	3,000 rpm (R-134a) 3,000 rpm (R-22/R-407C)
Refrigerant	R-134a R-22/R-407C	R-134a R-22/R-407C
Oil capacity	4.2 liter (8.9 pints)	4.2 liter (8.9 pints)
Oil pump	Gerotor type	Gerotor type
Oil type	TK Part No. 67-404 (R-22) Alkybenzene TK Part No. 203-513 (R-134a/R-407C) Polyolester	TK Part No. 67-404, (R-22) Alkybenzene TK Part No. 203-513 (R-134a/R-407C) Polyolester
Maximum tilt	10° any direction	10° any direction
Drive method	Belt or direct	Belt or direct
Max. belt side loading	136 kg (300 lbs.)	136 kg (300 lbs.)
Operating Conditions		
Max. discharge temp.	162.8°C (325°F)	162.8°C (325°F)
Max. saturated suction temp.	12.7°C (55°F)	12.7°C (55°F)
Max. saturated discharge temp.	68.3°C (155°F)	68.3°C (155°F)

Clutch Assembly	
Type	Electro-magnetic
Voltage	12V dc/24V dc
Current draw	5.0 amps/2.5 amps
Engagement speed	0 to 3,000 rpm (X426/X430)
Drive pulley O.D.	229 mm (9.0 in.) 197 mm (7.75 in.)
Available belt types	B type, 2 groove 5V, 2 groove
Rotation	Clockwise or counter-clockwise (clutch end)
Peak torque	80 ft. lbs.

Weight: (approximate)

Model X426 52.2 kg (115 lbs.)
Model X430 52.2 kg (115 lbs.)
(Including oil, service valves and clutch)

Dimensions: millimeters (inches)



Worldwide Service Organization

Thermo King backs its equipment and customers with a highly-trained, worldwide service organization. This assures you the support of factory authorized service facilities and a stock of factory parts and factory trained mechanics.

Warranty Summary

Terms of the Thermo King Warranty are available on request from your local Thermo King dealer. Please reference document TK50049 for the Thermo King Bus Unit Warranty.

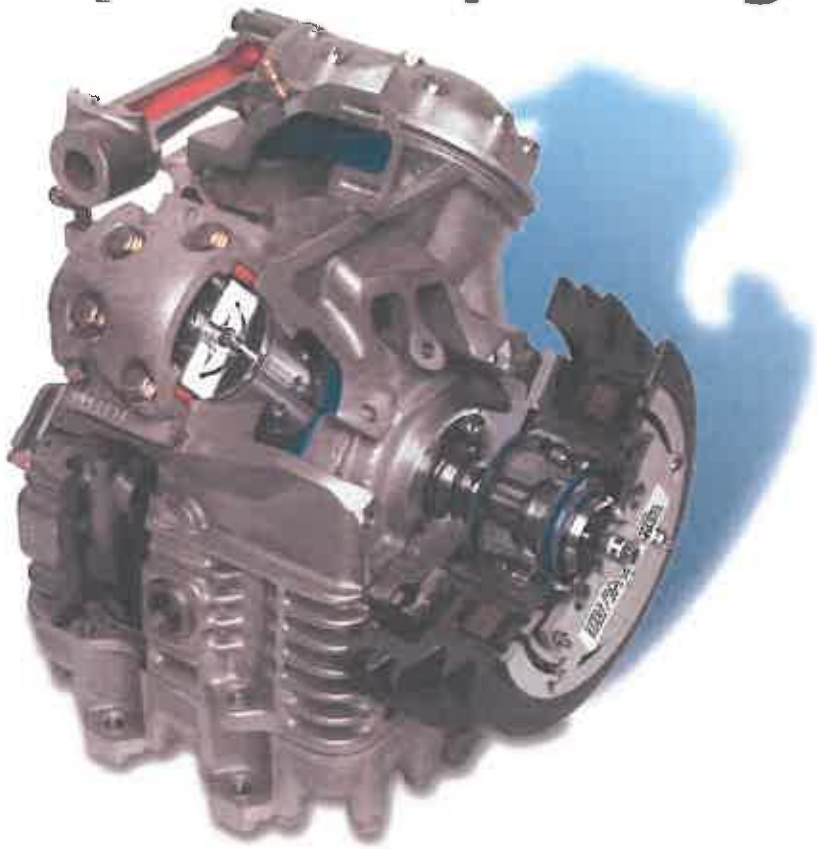
Ingersoll Rand
Climate Control Technologies

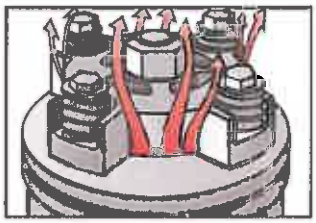
Providing equipment and services to manage controlled-temperature environments for food and other temperature-sensitive products, our Climate Control Technologies sector encompasses both transport and stationary refrigeration solutions. Our product brands include Thermo King®, a world leader in transport temperature control systems, and Hussmann®, a manufacturer of refrigeration and food merchandising equipment.

TK 30174-3-PL (9-08)

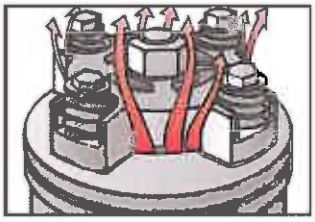
www.thermoking.com www.hussmann.com www.ingersollrand.com

How Thermo King compressors **help lower operating costs.**

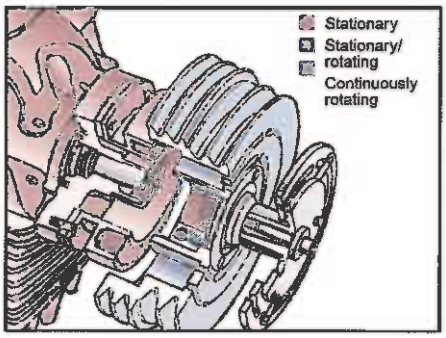




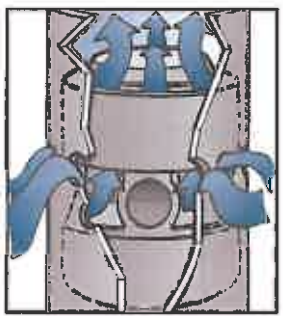
During normal operation, the discharge valve lifts to allow compressed gas to exit the cylinder.



Under abnormal conditions, when extreme pressure is created by liquid refrigerant or oil entering the cylinder, the entire discharge valve cage lifts to vent the excessive pressure. This 2-stage pressure relief system helps extend overall compressor life.

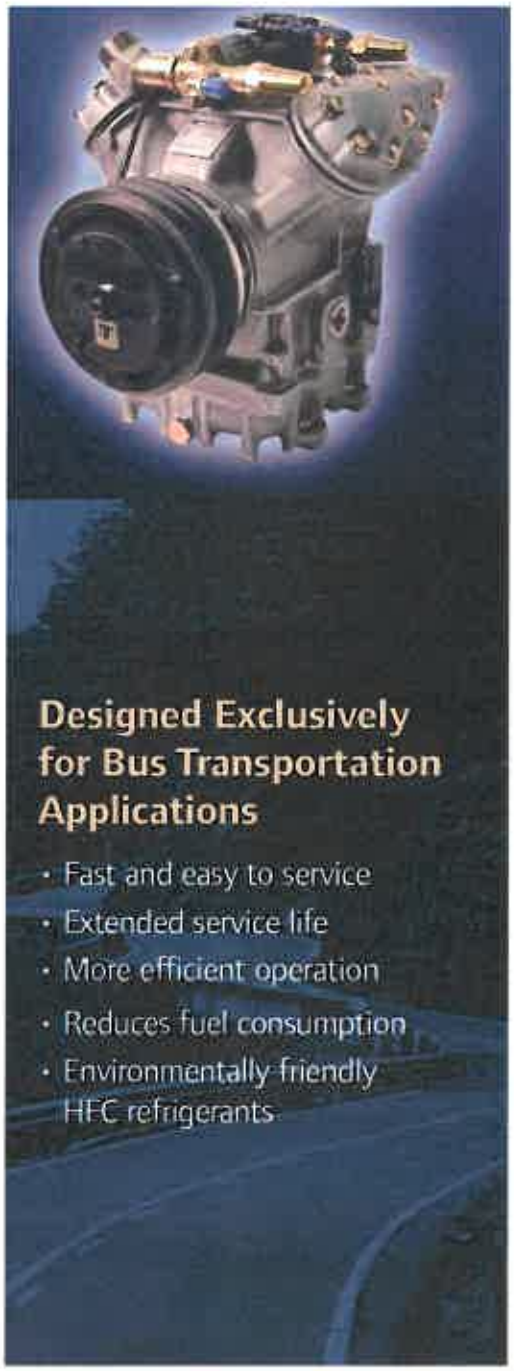


Weight of the clutch and belt side load is supported directly by the rigid compressor body. Only the friction plate and retaining bolt are mounted on the shaft, reducing the amount of stress on the crankshaft, increasing overall life of other compressor components.



Cool refrigerant gas enters the chamber around and through the piston, reducing the operating temperature and resulting in a cooler, more efficient running compressor.

- ✓ Body mounted clutch reduces wear on compressor parts.
- ✓ Magnetic clutch design saves fuel.
- ✓ Epoxy sealed clutch coil for lower maintenance.
- ✓ Mounting of clutch bearing ensures even wear, protects against premature wear.
- ✓ Double row ball bearings add strength, longer life.
- ✓ Teflon grease seals increase bearing life.
- ✓ Ease of lubrication reduces maintenance time.
- ✓ Friction plate air gap easily adjusted.
- ✓ Pulley face is easily reconditioned.
- ✓ Stainless steel bellows seal for improved reliability.
- ✓ Multiple sight glass assures vision will not be blocked when checking oil.
- ✓ Deep oil sump results in fewer breakdowns, longer compressor life.
- ✓ Suction strainer and refrigerant oil filter prevent recirculation of harmful particulates, extends compressor life.
- ✓ Check valves limit oil escape, increases lubrication during startup, extends compressor life.
- ✓ Spring-loaded discharge valve cage relieves pressure if hydraulic pressure develops in cylinder.
- ✓ Free-floating suction and discharge valve reeds allow greater gas flow.
- ✓ Replaceable cylinder sleeves allow overhauling without reboring, lowers cost of repairs.
- ✓ Vanasil alloy ringless pistons for long life performance and high pumping efficiency.
- ✓ Gas cooling lowers piston operating temperature, extends compressor life.
- ✓ Gerotor oil pump extends compressor operating life.
- ✓ Drilled oil passages through crankshaft deliver positive lubrication to bearing surfaces extending bearing life.
- ✓ Forged steel crankshaft and connecting rods add strength, increase compressor life.
- ✓ Field-replaceable crankshaft ball bearings, rather than bushings, results in less expensive overhauls.
- ✓ Lightweight aluminum body transfers heat rapidly for cooler, more efficient operation.



Designed Exclusively for Bus Transportation Applications

- Fast and easy to service
- Extended service life
- More efficient operation
- Reduces fuel consumption
- Environmentally friendly HFC refrigerants

Lower your **operating costs.**

Today, in the bus transportation business, "operating costs" are critically important. Finding ways to reduce operating costs will have a positive influence on profitability. Thermo King understands that, which is why you should know all the ways Thermo King compressors work to keep your operating costs down. Here's how:

Engineered exclusively for transport applications

Built for continuous duty, reliable operation, and long life in an environment that features extreme fluctuations in operating temperatures, constant shock and vibration, dirt, dust, and other potential contaminants. Reliability translates directly to less downtime and lower operating costs.

Built for extended service life

Thermo King compressors have been designed and built for extended service life. And fewer repairs mean lower parts and labor costs.

Reduces fuel consumption

The Thermo King unique clutch system allows cycling at any engine speed. This allows the compressor to disengage when cooling isn't needed, reducing the load on the bus engine and conserving fuel. The compressor is sized to provide capacity, but not oversized to where it increases fuel consumption and operating costs.

Less wear and tear on bus transmission and engine

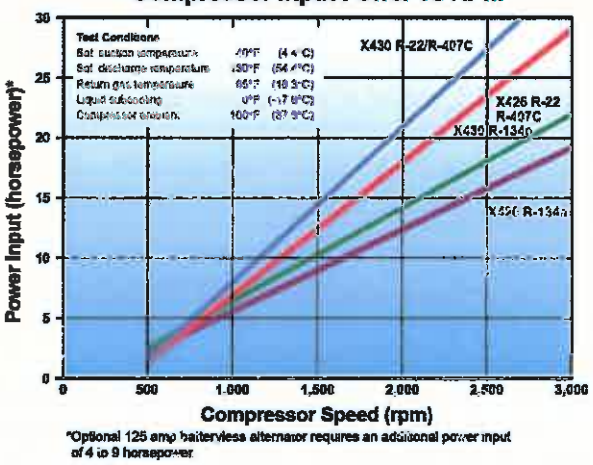
The in-line, V-type, four-cylinder reciprocating design of Thermo King compressors, coupled with top center positioning of pistons every 90 degrees relative to the crankshaft, results in smooth even torque load on the bus transmission and engine crankshaft for longer life, fewer repairs, fewer replacement parts, and fewer man hours in repair.

Fast and easy to service

A Thermo King compressor can be completely overhauled by one mechanic (using common shop tools) in less than four (4) hours, without the need for complicated and costly machining.

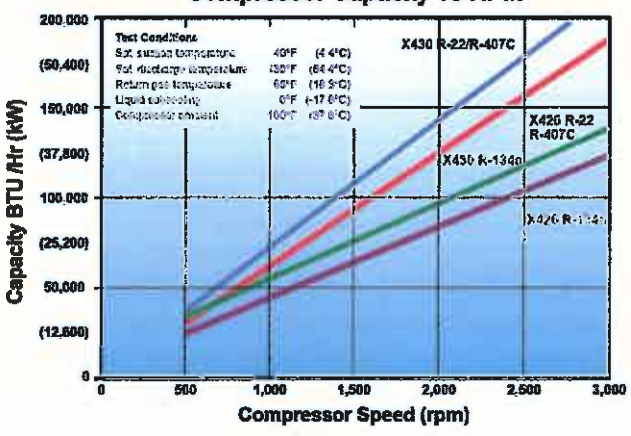
How environmentally friendly refrigerants perform.

Compressor Input Power vs RPM



*Optional 125 amp brushless alternator requires an additional power input of 4 to 9 horsepower

Compressor Capacity vs RPM



Ingersoll Rand.

Ingersoll Rand's Climate Solutions sector delivers energy-efficient HVACR solutions for customers globally. Its world class brands include Thermo King, the leader in transport temperature control and Trane, a provider of energy efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for commercial buildings and homes.

Distributed by:

TK 55861-3-PL (11-13)

THERMO KING

X426 and X430 Compressor and Clutch

Air conditioning compressors and clutches for bus applications.

Ingersoll Rand
Climate Control Technologies

SPECIFICATIONS

SYSTEM COOLING CAPACITY (RATED CAPACITIES)	ATHENIA AM II 960	ATHENIA AM II 1000
BTU/hr	92,000	113,000
kW	30	33.1
Kcal/hr	23,183	28,476
Rated capacities are at following conditions:		
Outside	35°C/95°F	
Inside	27°C/80°F DB	
	19°C/67°F WB	

SYSTEM HEATING CAPACITY	
At 30 Lt./Min.(8 GPM) coolant flow rate and 55K (100°F) temperature differential between return air and coolant.	
BTU/hr	115,000
kW	33.7
Kcal/hr	29,040

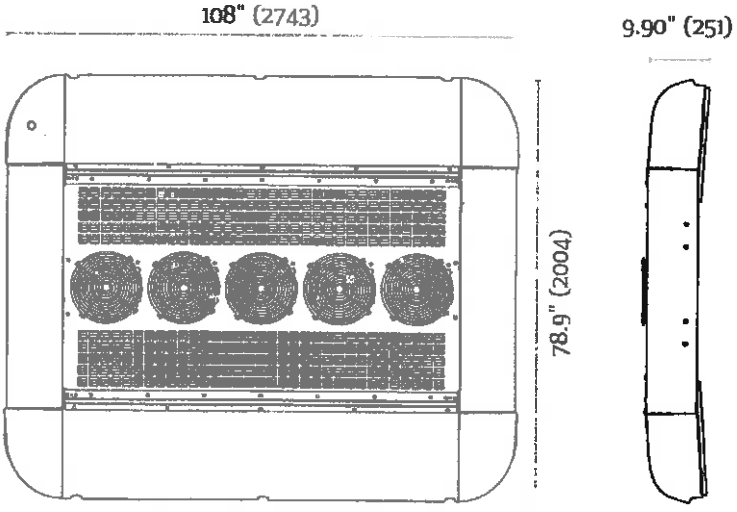
EVAPORATOR AIRFLOW	
(0 in. water column external static pressure)	
High Speed	3200 ft³/min
Medium Speed	1900 ft³/min
Low Speed	1350 ft³/min

REFRIGERANT		
	HFC R-134a	HFC R-407C

POWER CONSUMPTION @ 27 VDC	
	120 Amps

WEIGHT	
	470 lbs (213 kg)

COMPRESSOR WEIGHT WITH CLUTCH (APPROXIMATE)	
S391	147 lbs (67 kg)
S616	171 lbs (77 kg)
X426/X430	115 lbs (52.2 kg)



Worldwide Service Organization

Thermo King backs its equipment and customers with a highly-trained, worldwide service organization. This assures you the support of factory authorized service facilities and a stock of factory parts and factory trained mechanics.

Warranty Summary

Terms of the Thermo King Warranty are available on request from your local Thermo King dealer. Please reference document TK50049 for the Thermo King Bus Unit Warranty.

MORE STANDARD FEATURES THAN EVER!

Why pay for more than you want. Thermo King provides standard features designed to meet your needs.

INTELLIGAIRE III™ CONTROL SYSTEM

- Expanded CAN communications capability
- Plugs directly into J1939 network to make more info available
- Eliminates the gateway module required between bus & unit controllers
- Eliminates need for expansion modules external to controller where multiple zones must be controlled independently

HIGH PERFORMANCE R-407C OR R-134A

- Environmentally safe alternatives with zero ODP

THE THERMO KING X430 COMPRESSOR

- Engineered exclusively for transport applications
- Built for extended service life
- Field repairable

ELECTRONIC CAPACITY CONTROL

- Capacity can be reduced when not needed for fuel savings on cooler days
- Improved temperature balance on Arctic buses so capacity can be shifted from unit to unit as needed

MOTORIZED WATER VALVE

- Improved temperature control in re-heat and heating modes
- Eliminates water hammer

OPTIONAL FEATURES INCLUDE:

Take control of your operating costs with these cost-saving options available only from Thermo King.

INTELLIGAIRE III™ ELECTRONIC PRESSURE DISPLAY MODULE

- Touchpad displays four different pressure readings
- Simplifies problem diagnosis and pre-trip inspections

S391/S616 SCREW COMPRESSORS

- Exclusive oil management system for increased reliability
- Fewer moving parts than reciprocating compressors
- Lower noise levels and vibration than reciprocating compressors
- Programmable capacity control for fuel savings

LONG LIFE BRUSHLESS MOTORS

- Integral electronics
- 10% greater airflow
- Maintenance-free
- Programmable variable speed
- 40,000-hour bearings

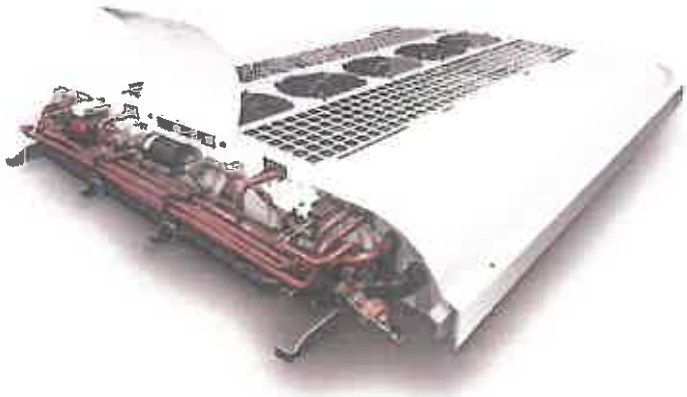
OTHER AVAILABLE OPTIONS

- Return Air Grille
- Damper-Controlled Fresh Air Module

WHAT YOU NEED A REALITY.

NEW ELECTRONIC CAPACITY CONTROL

- Capacity can be reduced when not needed for fuel savings on cooler days
- Improved temperature balance on Arctic buses so capacity can be shifted from unit to unit as needed

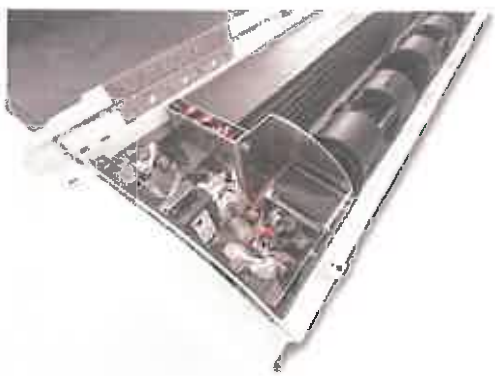


NEW MOTORIZED WATER VALVE

- Improved temperature control in re-heat and heating modes
- Eliminates water hammer

UNIT CONTROLS IN CONDITIONED AIR SPACE

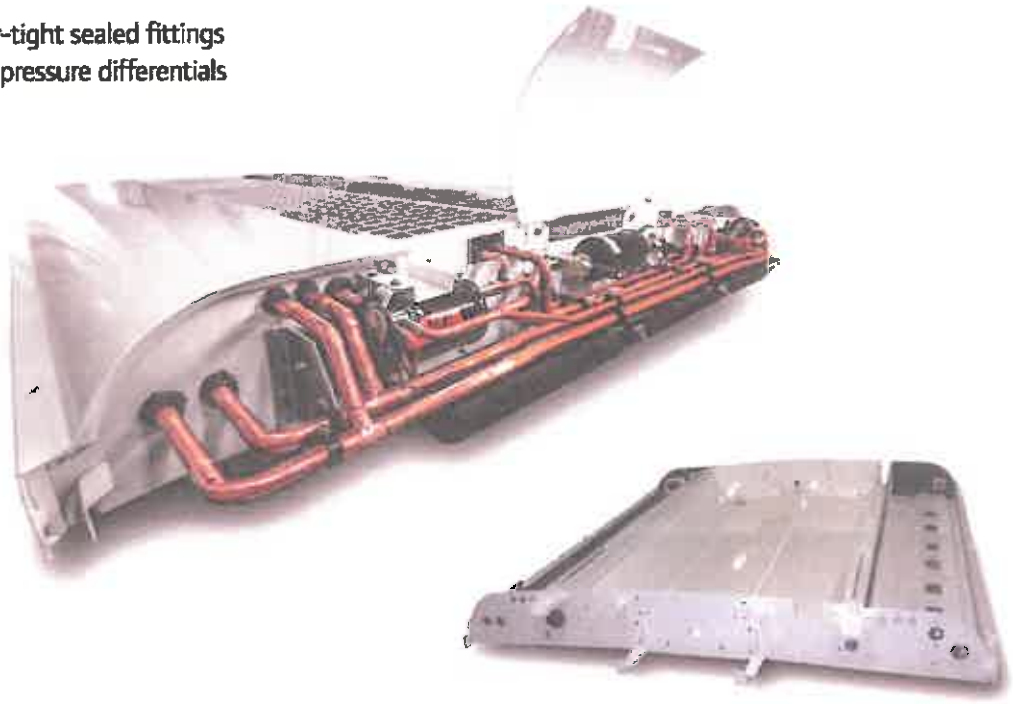
- Improved environmental protection
- Improved access and servicability



USING WHAT WE KNOW TO MAKE

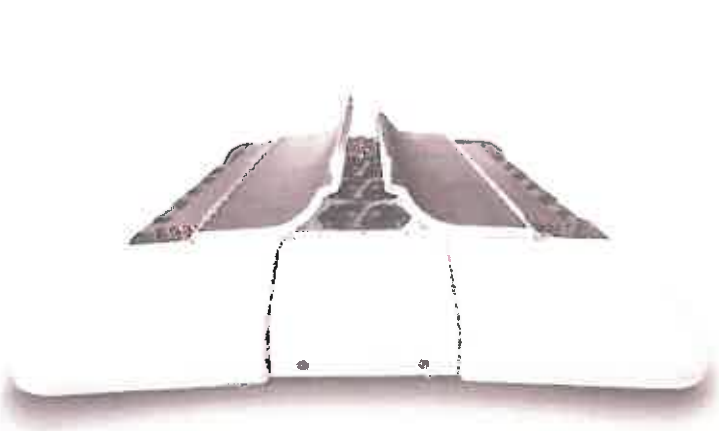
WATER TIGHT DESIGN

- Harness interface points use water-tight sealed fittings
- No water ingress due to high/low pressure differentials
- One piece welded frame
- No rivets or sealant



NEW SIDE-ACCESS COVERS

- Gull wing doors eliminate prop rods
- Improved latching, sealing, access and aesthetics



FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 18 Section Title Windows

Describe Request. Include **appropriate supporting documentation as outlined in the RFP:**

Specification in question:
Materials
Side window glazing material shall have a ¼-inch nominal thickness tempered safety glass...Windows on the bus sides and in the rear door shall be tinted a neutral color, complementary to the bus exterior. The maximum solar energy transmittance shall not exceed 37 percent, as measured by ASTM E-424, and the luminous transmittance shall be no less than 16 percent as measured by ASTM D-1003.

Question/Clarification or Approved Equal:
Approval requested for hidden frame **passenger side windows provided with a 3/16" thickness, 13% LT** and a solar energy transmittance value of 12%, in lieu of 1/4" nominal **thickness** tempered safety glass. This is **the only configuration available from our window vendors.**

GPTD Response:

Approved: ☒ X **Denied:** ☐ **Noted:** ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

Driver Side Windows

GLAZING

Glazing required for driving visibility must conform to ANSI Z26.1 AS2 which necessitates that the glazing must have a minimum of 70%VLT (% Visible Light Transmittance).

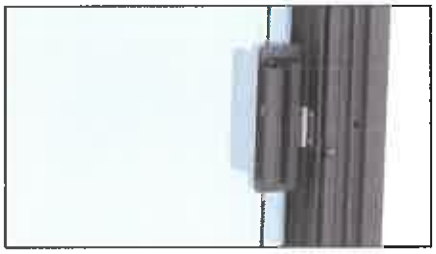
Common glazing specifications include:

Type	Color	Thickness	%VLT[1]	%TSET[1]	%UV[1]	Notes
Laminated Glass	Green	6mm	72%	68%	<1%	Laminated glass is not recommended for Flush Glass/Frameless style windows due to the fragile nature of the exposed edges. Tempered glass possesses more strength and impact resistance, but does not have the premium UV rejecting properties associated with non-tempered, laminated glass.
	Blue/Green	6mm	75%	31%	<1%	
	Green SMG[2]	6mm	74%	40%	0%	
Tempered Glass	Green	6mm	75%	47%	31%	
	Green	5mm	79%	51%	35%	
	Blue/Green	5mm	72%	36%	46%	

[1]Data is approximate and subject to change due to float glass manufacturing and window fabrication tolerances
VLT=Visible Light Transmittance, TSET=Total Solar Energy Transmittance, UV=Ultraviolet Light Transmittance
[2]SMG is a trademark of Guardian Glass

HANDLE OPTIONS

All of the handle options outlined below are available on anyone of AROW Global's driver windows.



PULL HANDLE: The size and shape of the pull handle makes it easy to hold onto while opening and closing the window.

- Material - Extruded aluminum and anodized to a black or clear finish.
- Location - Front and/or rear sliding sash.
- Other Features - Exterior handles may be specified to permit dash access from outside the vehicle. Handles may be specified with an optional pinch latch on both Evolution and Storm-Tite windows.

ROCKER LATCH: The rocker latch provides the greatest visibility and control to the driver. The rocker latch allows the driver to effortlessly open and secure the window in various positions; the strikes can be set to open at various increments of 2.75".

- Material - Machined aluminum and black powder coat paint.
- Location - Front and/or rear sliding sash.

PULL KNOB*: The smaller size of the pull knob provides greater visibility to the driver.

- Material - Machined aluminum and black powder coat paint.
- Location - Front and/or rear sliding sash.

*Available with tempered glass only.

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 19 Section Title Heating Ventilating and Air Conditioning

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Capacity and Performance
The District currently uses ThermoKing T14-M6 units on their coaches

Question/Clarification or Approved Equal:
Approval requested to provide a heavy-duty Thermo King, Athenia AMII Rooftop mounted HVAC system. This system has a heating system rating of 100,000 BTU. The air conditioning component of the Athenia is rated at 113,000 BTU when utilizing R407C refrigerant. The HVAC system incorporates a Thermo King, model X430 refrigerant compressor. The electronic climate control system is the Thermo King - Intelligaire III. Roof-mounted HVAC systems are standard on the Axess diesel model; this is a critical design element which cannot be modified. Please reference the attached Athenia AMII and X430 compressor brochures.

GPTD Response:

Approved: ☒ X Denied: ☐ Noted: ☐

Comments:

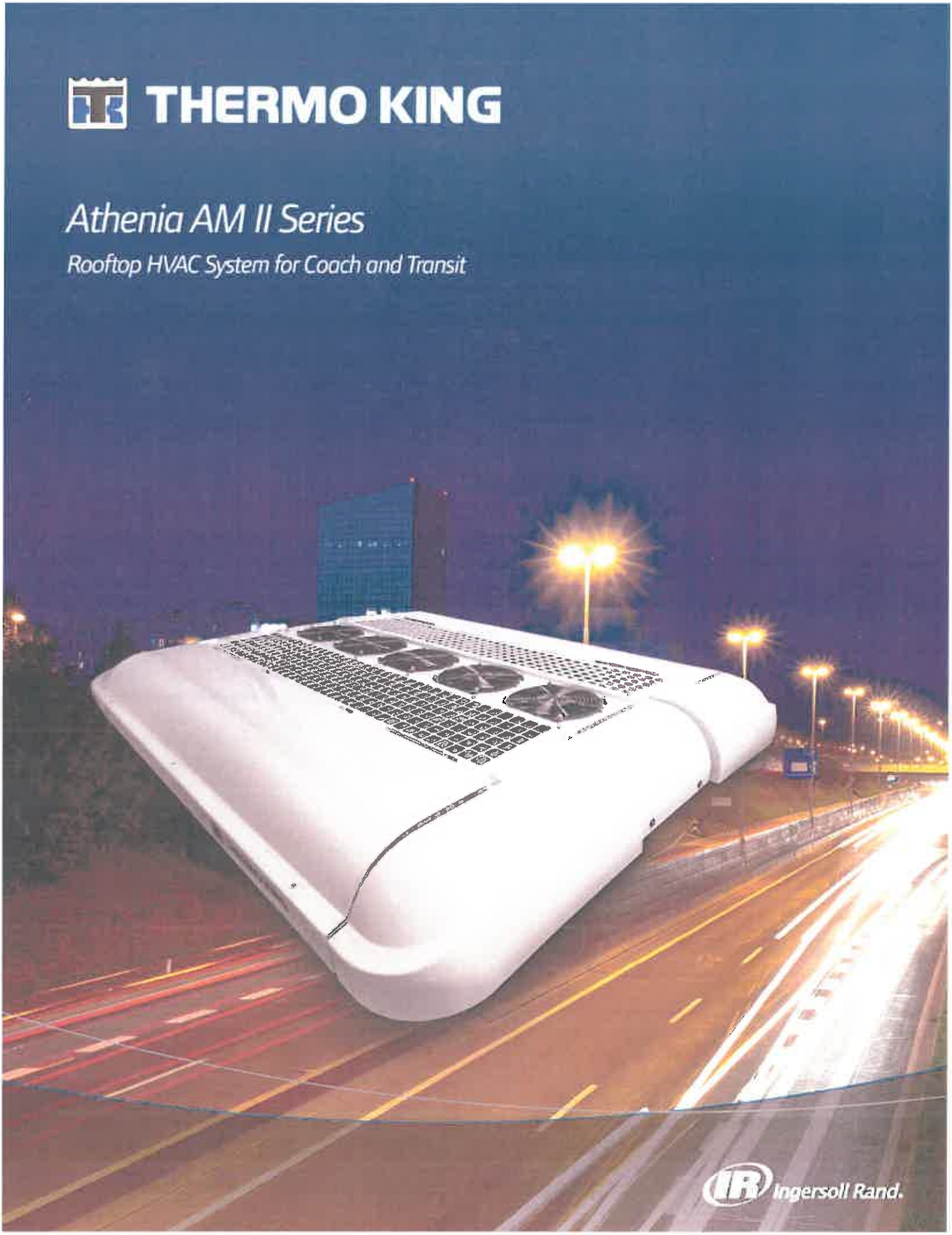
(GT) 3/3/22

Signature of GPTD Official Date

THERMO KING

Athenia AM II Series

Rooftop HVAC System for Coach and Transit



Ingersoll Rand.

Introducing the Athenia AM II Series

Featuring an updated design that delivers improved quality and reliability while offering new features and significant enhancements.

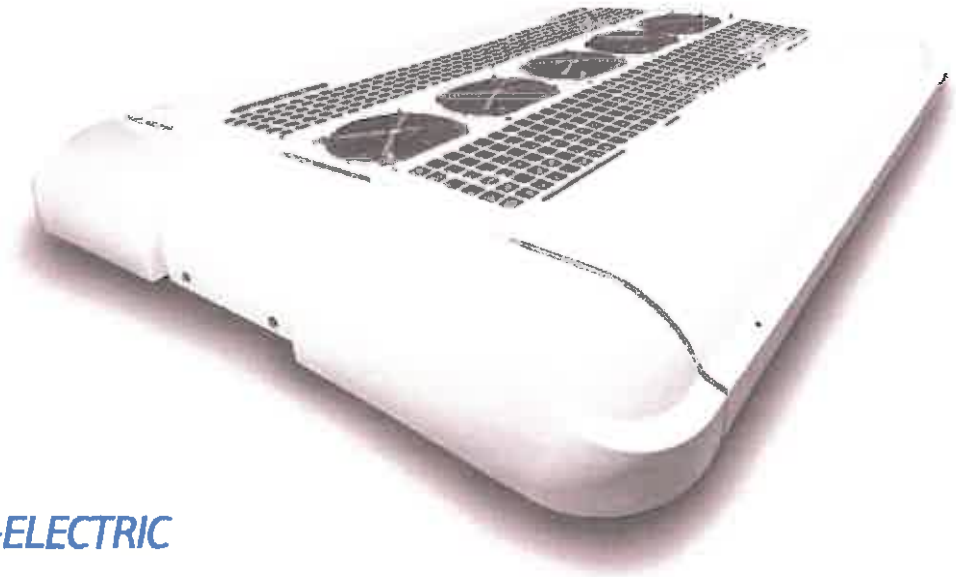
A LOW-WEIGHT, HIGH-PERFORMANCE ROOFMOUNT SYSTEM!

- Easy-to-install one-piece design
- interigAiRE iiTM microprocessor controller with CANBUS communications
- Designed to fit CNG, hybrid and diesel buses
- Transducers standard
- Motorized water valve standard
- Electronic capacity control standard

- 10% weight reduction
- Welded frame
- Reduced number of potential leak points
- No sealants used in design
- Stiffer construction for improved unit/bus sealing
- 10% more condenser airflow
- 5% more evaporator airflow
- Access all servicable items from inside bus

The Rock-Solid Result of over 50 Years of HVAC Design Experience!

ONE PLATFORM FOR ALL YOUR NEEDS!



ATHENIA AM II E-800 ALL-ELECTRIC

- System for hybrid, trolley and battery buses

ATHENIA AM II EA-800 ALL-ELECTRIC WITH:

- Exclusive alternator/inverter power for standard diesel and CNG-powered buses

ATHENIA AM II 960

- Base platform with R-134a refrigerant

ATHENIA AM II 1000

- Base platform with R-407c refrigerant

AVAILABLE MID-2014 Micro Channel-brazed aluminum condenser coils become the standard for reduced weight, reduced refrigerant and improved performance

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV **Section Number** 18 Section Title **Windows**

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Driver's Side Window
A two-piece full slider with bonded, hidden frame meets this requirement.

Question/Clarification or Approved Equal:
Approval requested for a driver' hidden frame side window that is 3/16" tempered glass and has a fixed, horizontal section over the slider in the lower ¾ of the window in lieu of two-piece full slider 1/4" laminated safety glass as specified. Laminated glass is not recommended for Flush Glass/Frameless style windows due to the fragile nature of the exposed edges. This is a critical build issue due to the radius of our BRT front end. Please reference attached AROW Global Driver Window brochure.

GPTD Response:

Approved: ☒ **Denied:** ☐ **Noted:** ☐

Comments:

GF — 3/3/22

Signature of GPTD Official **Date**

Driver Side Windows

At AROW Global our mission is to develop innovative solutions for our customers, including transit bus companies, transit authorities, and transit unions. As part of our commitment to product innovation and customer satisfaction we are pleased to offer our customers various options when selecting driver windows.

Both our **Evolution Framed Window Series** and **Storm-Tite Flush Window Series** offer options to suit any budget and style need.

WINDOW DESIGNS

EVOLUTION FRAMED WINDOW SERIES

STORM-TITE FLUSH WINDOW SERIES

FULL SLIDERS

Window can opened via a front sliding sash or front and rear sliding sash.

FIXED OVER SLIDERS

Window has a fixed upper portion and a lower sliding section which can be opened via a front sliding sash or a front and rear sliding sash. This design is recommended for taller window openings that do not permit a full slider design.

HI-VIZ SLIDERS

Designed to maximize driver viewing, Hi-Viz full height slider windows use fewer frame components and can be equipped with a front sliding sash only.

All windows, except for the Evolution Framed Hi-Viz Slider, are available in egress or non-egress configurations

SHADE BANDS

All driver windows can be equipped with shade bands either in a dot matrix form or a tinted band.

924 North Park View Circle | Mosinee, Wisconsin USA 54455 | P. 715.693.6020 | F. 715.693.7108 | www.arowglobal.com

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title Driver Provisions

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Windshield Wipers
The windshield washer system shall have a **minimum** 3-gallon reservoir, located for easy refilling and protected from freezing.

Question/Clarification or Approved Equal:
Approval requested to supply a 2.6-gallon windshield **washer reservoir.** This is the largest windshield washer reservoir that can be accommodated in **our low floor design.** This is a **critical design element, which** cannot be modified.

GPTD Response:

Approved: X **Denied:** ☐ **Noted:** ☐

Comments:

GP 3/3/22

Signature of GPTD Official Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title Driver Provisions

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Onboard Diagnostics: Audible Alarm
Low-DEF Buzzer

Question/Clarification or Approved Equal:
Approval requested to provide a Low-DEF beeper in lieu of the requested buzzer.

GPTD Response:

Approved: ☒ X Denied: ☐ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title Passenger Accommodations

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Dimensions
When open, the doors shall leave an opening no less than 84.5 inches in height.

Question/Clarification or Approved Equal:
Approval requested for a door opening of 81 inches in height in lieu of the requested 84.5 inches.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

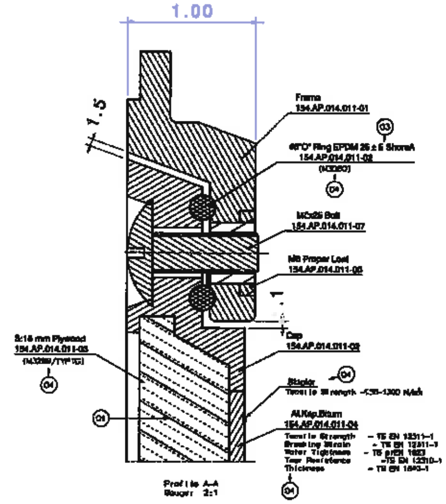
Comments:

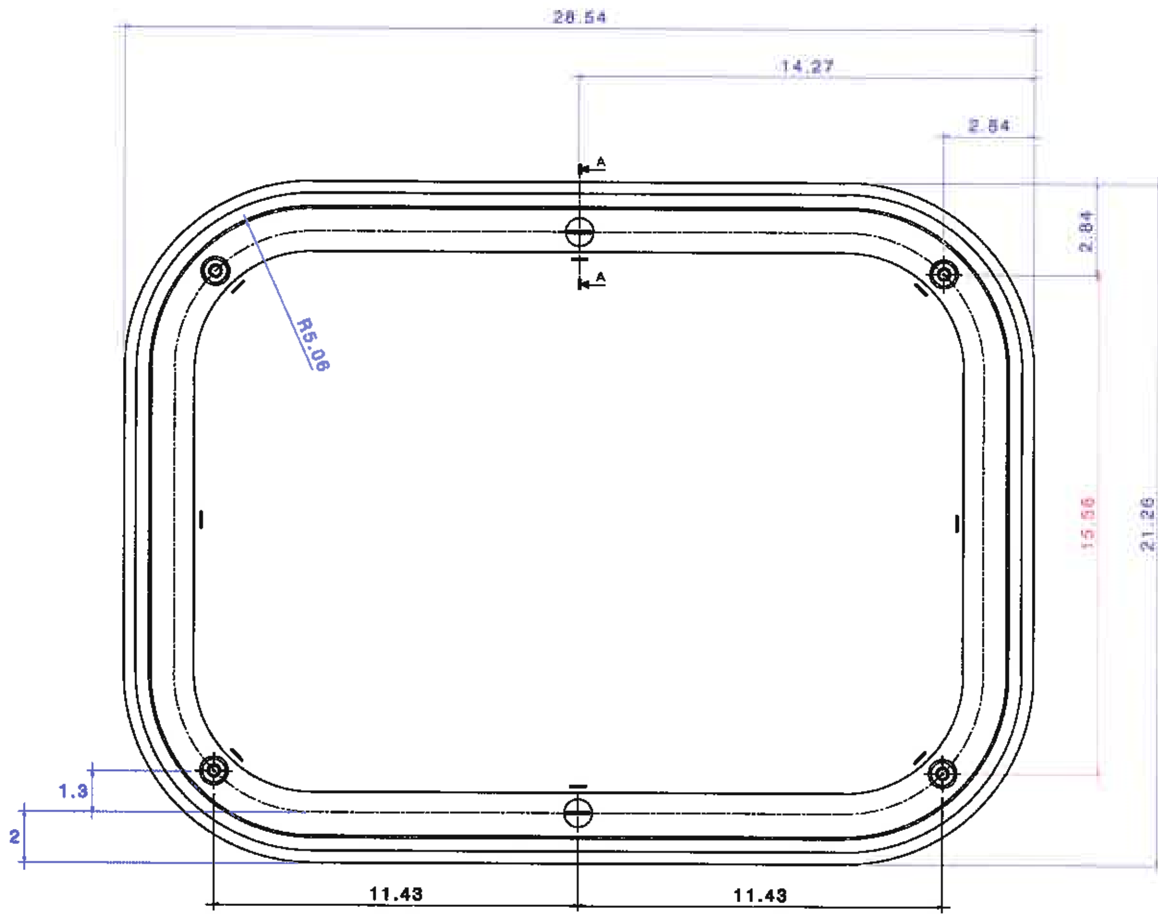
GP

Signature of GPTD Official

3/3/22

Date





Note: M8x25mm (154.AP.014.011-07) bolt is outside the scope of delivery.

Ind.	Änderungsbeschreibung/Revision text	Datum/Date	Bearb/Author	Prüfer/Ch
004	[illegible]	30.05.06	S.ALAGÖZ	D.ERTAS
003	[illegible]	30.09.05	S.ALAGÖZ	D.ERTAS
002	[illegible] : Frame and cover technical drawing	14.12.04	S.ALAGÖZ	D.ERTAS
001	Plywood is used instead of [illegible]	25.08.04	E.KUZGUN	D.ERTAS

Erstellt mit/created with: CATIA R14

Maßstab/Scale: 1:2 – 2:1

	Datum/Date	Name
Bearb./Author	25.08.04	E.KUZGUN
Geprüft/Checked	25.08.04	D.ERTAS

Benennung/Title

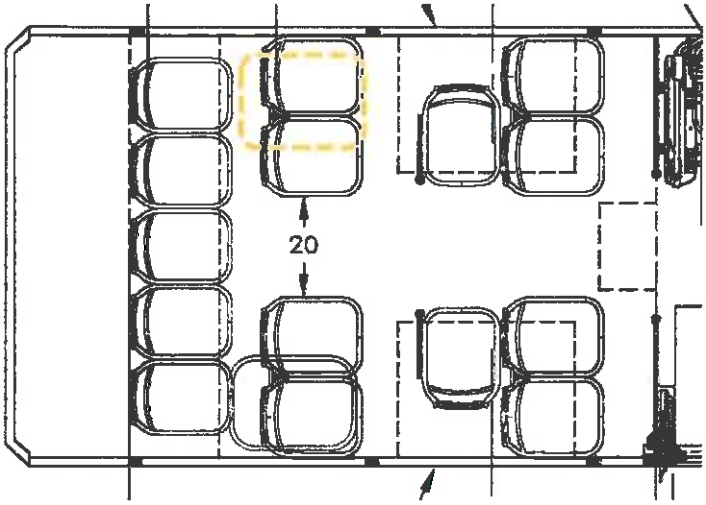
MAINTENANCE ENGINE COVER (COMPLETE)

purplast

Axess Interior Floor Access Point

The Axess units has the following interior floor access point:

One (1) floor hatch that is located on the roadside upper deck in front of the rear row seats (shown below in yellow). The Purplast floor hatch provides access to the circuit breakers wiring within battery compartment from the interior of the bus.



Please note: Drawings and pictures are meant to show location of floor hatch only and do not represent seating/stanchion layout. Please reference floorplan provided for seating configuration per customer specification.

9670 GALENA STREET, RIVERSIDE, CA 92509
909-591-9557 ◆ www.eldorado-ca.com

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title Interior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Access Panels and Doors
Flooring material shall be flush with the floor and shall be edge bound with a one-piece continuous stainless-steel flange to prevent the edges from coming loose.

Question/Clarification or Approved Equal:
Approval requested for one (1) floor hatch that is located on the roadside upper deck in front of the rear row of seats. The Purplast floor hatch provides access to the battery compartment from the interior of the bus. The hatch is not flush with the floor and is edge bound with cast polyurethane material. Please reference ENC's brochure along with OEM dimensional drawing.

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:

GF — 3/3/22

Signature of GPTD Official — Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 16 Section Title Passenger Accommodations

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Loading System
The Lift U ramp model#LU11-08-05 meets these requirements.

Question/Clarification or Approved Equal:
Approval requested to provide a LU-18 low floor ramp due to model LU11 no longer being produced by manufacturer.

GPTD Response:

Approved: X Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 17 Section Title Driver Provisions

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Windshield Wipers
The bus shall be equipped with a variable speed windshield wiper for each full half of the windshield, with separate controls for each side.

Question/Clarification or Approved Equal:
Approval requested for a single control, rotary switch on the left-wing panel. This is a critical design element, which cannot be modified.

GPTD Response:

Approved: ☐ **Denied:** ☒ **Noted:** ☐

Comments:

GD

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title Interior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Storage Box
An enclosed driver storage compartment shall be provided with a **positive** latching door **and/or lock,** located **on top of the curb-side wheel housing.**

Question/Clarification or Approved Equal:
Storage Box
An enclosed driver storage compartment shall be **provided with a positive latching door and/or lock,** located **on top of the curb-side wheel housing.**

GPTD Response:

Approved: ☐ Denied: ☐ **Noted:** ☒

Comments:
Question is same as specification.

CF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title Interior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Rear Bulkhead
If it is necessary to remove the panel to service components located on their rear bulkhead, the panel shall be hinged or shall be able to be removed and replaced by a 3M mechanic in 5 minutes.

Question/Clarification or Approved Equal:
Deviation requested for an air return grille that is held closed with 3/4 turn screws. There are no props to hold the grille open; but the grille is easily removed as one piece. Please reference the attached drawing from Thermo King.

GPTD Response:

Approved: X **Denied:** ☐ **Noted:** ☐

Comments:

GF

Signature of GPTD Official

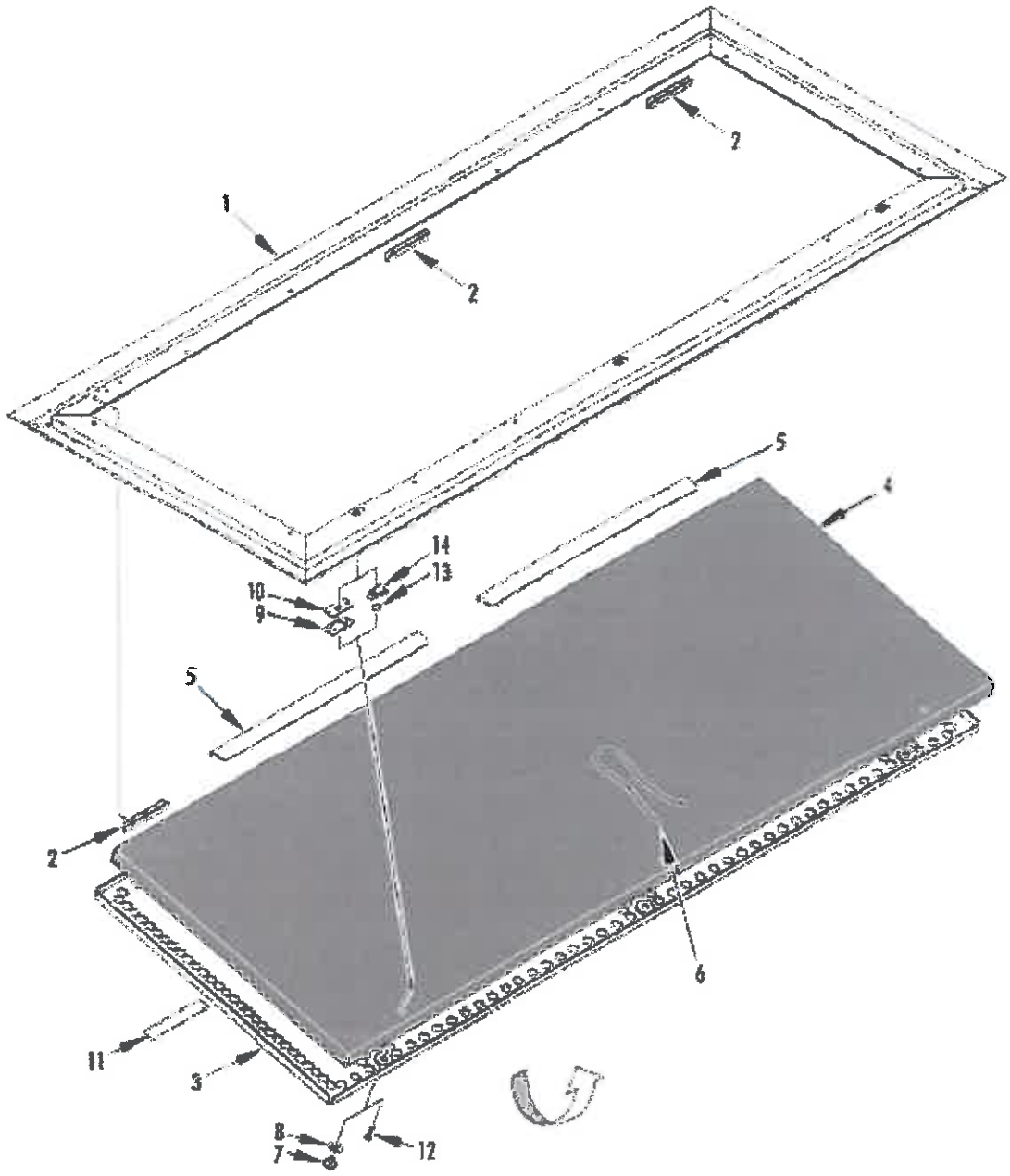
3/3/22

Date

153D12

RETURN AIR GRILLE (KIT 714765)

Revised
02/09/15



FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title Interior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Passenger Lighting
Interior lights shall be individually dimmable

Question/Clarification or Approved Equal:
Approval requested for interior lights that shall be dimmable by changing the interior lighting program.

GPTD Response:

Approved: ☐ Denied: ☒ Noted: ☐

Comments:
Interior lights should be dimmable manually by setting at light.

GF 3/3/22

Signature of GPTD Official Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title Interior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Driver Barrier
A barrier or bulkhead between the driver and the street-side front passenger seat shall be provided.

Question/Clarification or Approved Equal:
Approval requested for a unit where the full height, electrical cabinet for the unit is located directly behind the driver providing a separation between the driver and the passenger compartment.

GPTD Response:

Approved: ☒ X Denied: ☐ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 14 Section Title Interior Panels and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Front End
Paneling across the front of the bus and any trim around the driver's compartment shall be formed metal or plastic material

Question/Clarification or Approved Equal:
Approval requested for a unit where the dash is formed from fiberglass composite not formed metal.

GPTD Response:

Approved: ☒ X Denied: ☐ Noted: ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Service Compartment and Access Doors
Latch handles shall be **flush with**, or recessed **behind, the body and shall** be sized to provide an adequate **grip for opening.**

Question/Clarification or Approved Equal:
Approval requested for latch handles to be surface mounted in lieu of flush or recessed mounting. Please note that surface mounting of the latch handles provides for a much more adequate grip for opening compartment doors and especially for the larger compartment doors such as the engine and rear upper compartment doors.

GPTD Response:

Approved: ☐ **Denied:** ☒ **Noted:** ☐

Comments:

GP

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Service Compartment and Access Doors
Doors with top hinges shall have safety props stored behind the door or on the doorframe.

Question/Clarification or Approved Equal:
Approval requested for our standard rear engine and rear upper compartment access doors that are held open by two (2) gas springs.

GPTD Response:

Approved: ☐ **Denied:** ☐ **Noted:** ☒

Comments:
Gas springs may be used provided at least one spring has a safety lock to prevent door from closing.

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Front Bumper
Bumper shall provide mounting provisions for integrated bike rack.

Question/Clarification or Approved Equal:
Approval requested to provide an energy absorbing front bumper that utilizes a bracket provided by the bike rack manufacturer to install the bike rack. This is a critical design element that cannot be modified. Further note that an integrated bike rack is proprietary to one bus manufacturer.

GPTD Response:

Approved: ☒ X **Denied:** ☐ **Noted:** ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 13 Section Title Exterior and Finishes

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Service Compartment and Access Doors
All access doors shall be retained in the open position by props or counterbalancing with over-center or gas-filled and shall be easy operable by one person.

Question/Clarification or Approved Equal:
Approval requested for our standard battery box that does not provide props or counterbalancing. The door is hinged at the leading edge and held closed by a positive locking flush mounted latch.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 4 Section Title Overall Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Dimensions
Physical Size: (1) Body Length: 35 feet ± 6 inches

Question/Clarification or Approved Equal:
We would like to offer a 35' vehicle with a maximum body length of 35' 7" excluding bumpers. The increase in length will allow the purchase of our heavy-duty stainless steel Axess. Please reference attached elevation drawing.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

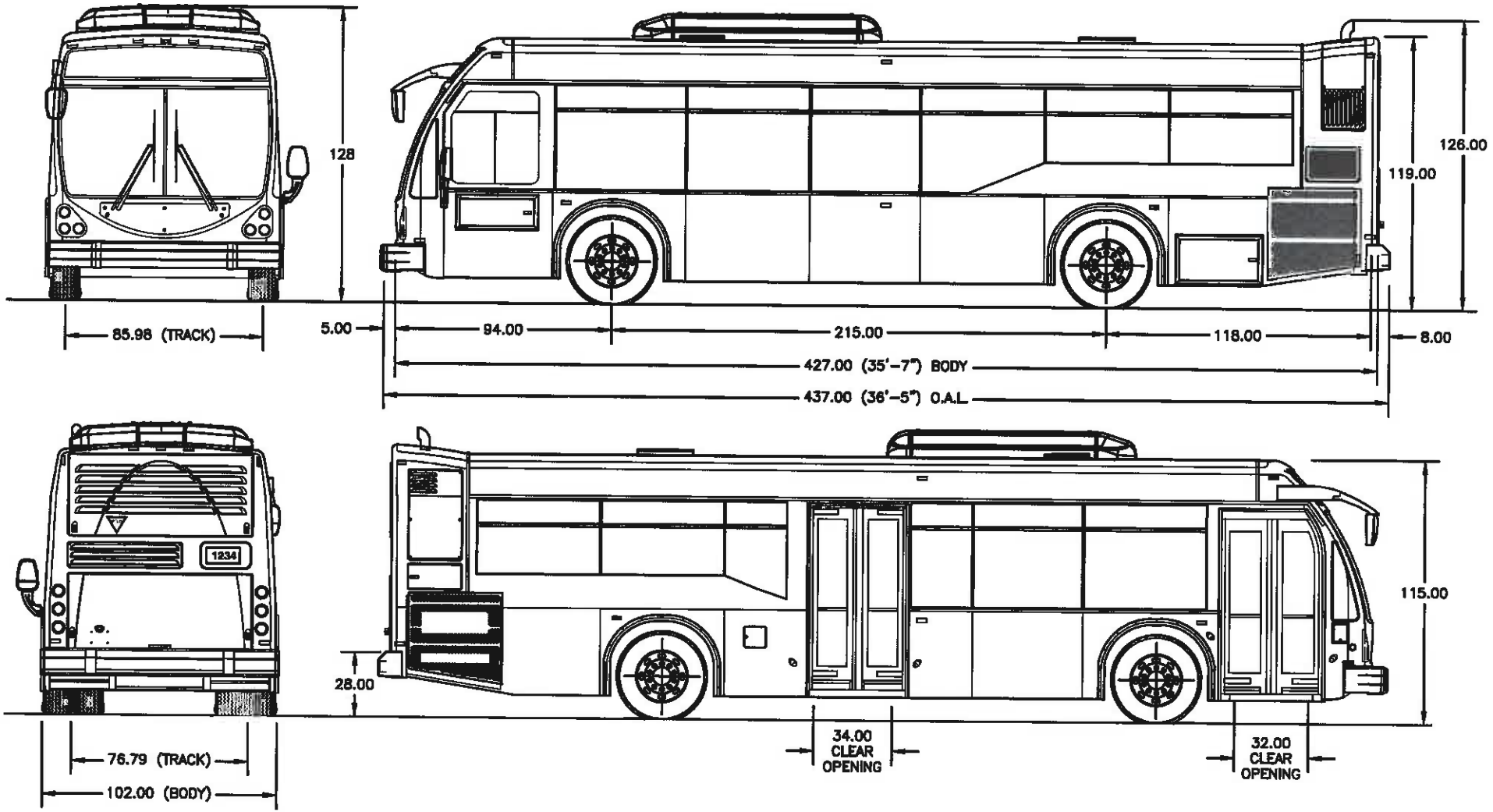
GF

Signature of GPTD Official

3/3/22

Date

REVISIONS						
ECN No.	REV	LVL	DESCRIPTION	DATE	ZONE	INITIAL



R3

NOTES: UNLESS OTHERWISE SPECIFIED.

ITEM	PART OR DWG. NO.	QTY.	SIZE	DESCRIPTION	SPEC.

DRAWN BY: LOREN L DATE: 2/4/22
APPROVED
SCALE: 1=32 SIZE: A
TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/32 DECIMAL .XX= ±.03 .XXX= ±.015 ANGLES ± 1°

TITLE: ELEVATION
AXESS – 35' R3

9670 Galena Street Riverside, CA 92509 Phone (909) 591-9557

MODEL: AXESS
DWG NO. .BE62H2DB0009
SHEET 1 OF 1
REV

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 4 Section Title Overall Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Interior Headroom
Headroom at the back of the rear bench seat may be reduced to a minimum of 56 inches, but it shall increase to the ceiling height of no less than 74 inches at the front of the seat cushion.

Question/Clarification or Approved Equal:
Clarification provided that the headroom at the back of rear bench seat is 54- ¾".

GPTD Response:

Approved: X Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 4 Section Title Overall Requirements

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Capacity
Rated capacity of the bus shall be no less than 32 seated passengers, not including the driver, with the specified seating arrangement.

Question/Clarification or Approved Equal:
Approval requested for 31 passengers per attached floor pan #B62A4QC0001 which provides expanded aisle width on the lower deck. As an alternative, please reference attached floor plan #B62A4QC0002 which provides the required 32 passengers but places the wheelchair positions slightly staggered across from each other. Please advise which floor plan you would like us to utilize for pricing purposes.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

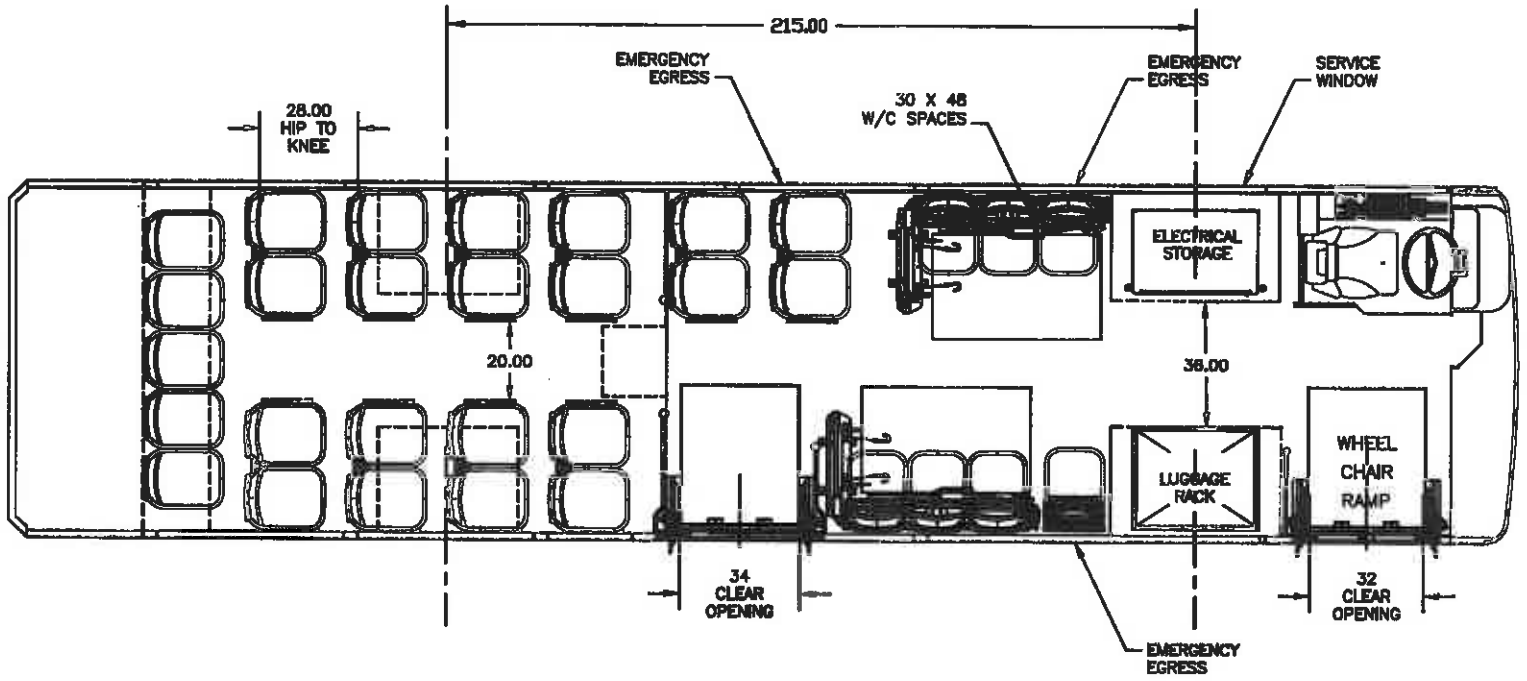
GF

Signature of GPTD Official

3/3/22

Date

REVISIONS						
ECN No.	REV	LVL	DESCRIPTION	DATE	ZONE	INITIAL



CONCEPTUAL PROPOSAL ONLY

CAPACITY:

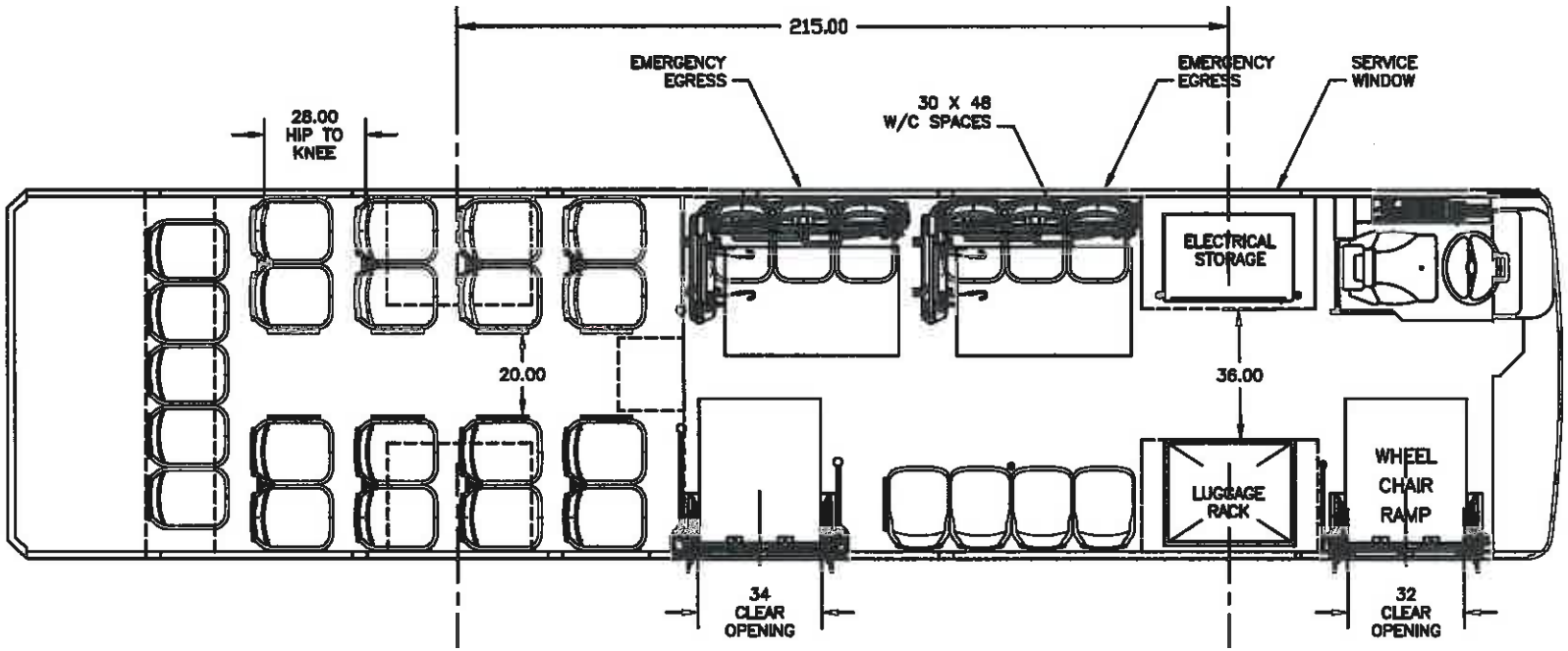
25 PASSENGERS WITH 2 WHEEL CHAIR POSITIONS
OR
32 PASSENGERS PLUS DRIVER
AMSECO VISION SEATS

R3

	PART OR DWG. NO.	QTY.	SIZE	DESCRIPTION	SPEC.
DRAWN BY LOREN L DATE 2/8/22				TITLE: FLOOR PLAN	
APPROVED				AXESS – 35' R3	
SCALE 1=28					
WEIGHTS UNLESS OTHERWISE SPECIFIED: DECIMAL ± 1/32, 3PL ±.030, ANGLES ± 1°				9670 Galena Street Riverside, CA 92509 Phone (909) 591-9557	
B62A4QC0002				MODEL AXESS DWG NO. B62A4QC0002 SHEET 1 OF 1 REV	

NOTES: UNLESS OTHERWISE SPECIFIED.

REVISIONS						
ECN No.	REV	LVL	DESCRIPTION	DATE	ZONE	INITIAL



CONCEPTUAL PROPOSAL ONLY

CAPACITY:

25 PASSENGERS WITH 2 WHEEL CHAIR POSITIONS
OR
31 PASSENGERS PLUS DRIVER
AMSECO INSIGHT SEATS

R3

ITEM	PART OR DWG. NO.	QTY.	SIZE	DESCRIPTION	SPEC.

NEXT ASSEMBLY

DRAWN BY LOREN L DATE 2/4/22
APPROVED
SCALE 1=28 SIZE A
B62A4QC0001

TITLE: FLOOR PLAN
AXESS – 35' R3

9870 Galena Street Riverside, CA 92509 Phone (909) 591-9557

MODEL AXESS | DWG NO. B62A4QC0001 | SHEET 1 OF 1 | REV

NOTES: UNLESS OTHERWISE SPECIFIED.

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 5 Section Title Vehicle Performance

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Top Speed
The bus shall be capable of a top speed of 70 mph (for emergency and passing maneuvers) on a straight, level road at GVWR with all accessories operating.

Question/Clarification or Approved Equal:
Approval requested for a top speed of 69.1 mph as estimated on the Allison SCAAN.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 5 Section Title Vehicle Performance

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Power Requirements
The engine shall meet all regulatory requirements when operating on fuel equal to CARB Specifications for Compressed Natural Gas #2292.5. The four predominant characteristics that must be met are methane, ethane, butane and propane.

Question/Clarification or Approved Equal:
Clarification requested whether this was on oversight for the CNG reference to be included, since this appears to be a Diesel only procurement.

GPTD Response:

Approved: ☐ Denied: ☐ Noted: ☒

Comments:
This was a typo. RFP is for procurement of diesel buses only.

GA

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part III Section Number 5 Section Title Vehicle Performance

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:

Speed (mph)	Maximum time (seconds)
10	5
20	10.8
30	20
40	31
50	n/a

Question/Clarification or Approved Equal:
Approval requested for the acceleration times to be modified as follows as estimated on the Allison SCAAN:

Speed (mph)	Maximum time (seconds)
30	18.4
40	31.5

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF — 3/3/22

Signature of GPTD Official — Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 6 Section Title Drivetrain

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Service
Engine oil and the radiator filler caps shall be hinged to the filler neck and closed with spring pressure or positive locks.

Question/Clarification or Approved Equal:
Approval requested for a non-hinged positive lock type radiator filler cap mounted on the surge tank which is integral with the engine coolant recovery tank system that utilizes a screw-on cap for checking the engine coolant level. Please note that the proposed engine coolant recovery system meets Cummins recommended design for EPA current year engines and beyond.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

CF

Signature of GPTD Official

3/3/22

Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 6 Section Title Drivetrain

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Fluid Lines, Fittings and Clamps, and Charge Air Pipework
The fuel lines forward of the engine bulkhead shall be in conformance to SAE **Standard J1149** Type 1 for copper tubing, SAE **Standard J526 for welded steel tubing,** or SAE Standard J844 for nylon **tubing color** coded orange.

Question/Clarification or Approved Equal:
Approval requested for a unit that uses our standard Parker 201 fuel lines compliant with SAE 100R5 in lieu of specified J1149 Type 1 for copper tubing, SAE Standard J526 for welded steel tubing, or SAE Standard J844 for nylon tubing color coded orange. Please see attached spec sheet.

GPTD Response:

Approved: ☒ X Denied: ☐ Noted: ☐

Comments:

GA 3/3/22

Signature of GPTD Official Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 6 Section Title Drivetrain

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Fluid Lines, Fittings and Clamps, and Charge Air Pipework
The clamps shall maintain a constant tension at all times, expanding and contracting with hose in response to temperature changes and aging of the hose material.

Question/Clarification or Approved Equal:
Approval requested to use constant torque clamps but only down to 5/8" hoses, anything smaller we use standard worm clamps.

GPTD Response:

Approved: ☒ Denied: ☐ Noted: ☐

Comments:

GF — 3/3/22

Signature of GPTD Official — Date

FORM 17
APPROVED EQUALS REQUEST FORM

CBS / ElDorado National (California), Inc.
Proposer/Vehicle Manufacturer

RFP Part IV Section Number 11 Section Title General

Describe Request. Include appropriate supporting documentation as outlined in the RFP:

Specification in question:
Air Reservoirs
All air reservoirs shall meet the requirements of FMVSS Standard 121 and SAE Standard J10 and shall be equipped with clean-out plugs and guarded or flush type drain valves.

Question/Clarification or Approved Equal:
Approval requested for our standard air tank design that provides drain plugs that are not guarded. The wet tank is stored within the engine compartment with automatic drain valve and the auxiliary tanks are stored above the rear engine deck out of the elements. These locations remove the air tanks from road impact areas where the drains can get damaged in operation.

GPTD Response:

Approved: X Denied: ☐ Noted: ☐

Comments:

GF

Signature of GPTD Official

3/3/22

Date

201

Transportation

SAE 100R5 SAE J1402 AII, D.O.T. FMVSS 106 AII - AIR BRAKE

# Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		Weight		Vacuum Rating inches of Hg		Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m		kPa	26 Series	20/22 Series
201-4	3/16	5	0.52	13	3000	21	3	75	0.15	0,22	28	95	•	•
201-5	1/4	6,3	0.58	15	3000	21	3-3/8	85	0.18	0,27	28	95	•	•
201-6	5/16	8	0.68	17	2250	15,7	4	100	0.23	0,34	28	95	•	•
201-8	13/32	10	0.77	20	2000	14	4-1/2	115	0.27	0,40	28	95	•	•
201-10	1/2	12,5	0.92	23	1750	12,2	5-1/2	140	0.37	0,55	28	95	•	•
201-12	5/8	16	1.08	27	1500	10,5	6-1/2	165	0.40	0,60	28	95	•	•
201-16	7/8	22	1.23	31	800	5,6	7-3/8	185	0.46	0,68	20	68	•	•
201-20	1-1/8	29	1.50	38	625	4,3	9	230	0.51	0,76	20	68	•	•
201-24	1-3/8	35	1.75	44	500	3,5	10-1/2	265	0.68	1,01	15	51	•	•
201-32	1-13/16	46	2.22	56	350	2,4	13-1/4	335	0.89	1,32	11	37	•	•
201-40	2-3/8	60	2.88	73	350	2,4	24	610	1.31	1,95	11	37	•	•
201-48	3	76	3.56	90	200	1,4	33	840	2.09	3,11	11	37		•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: Synthetic rubber.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -40°F to +302°F (-40°C to +150°C).

Fittings: 26 Series - pg. B-9.
20 Series - pg. B-125.
22 Series - pg. B-143.

206

Transportation

SAE 100R5 SAE J1402 AII, D.O.T. FMVSS 106 AII - AIR BRAKE

# Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		Weight		Vacuum Rating inches of Hg		Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m		kPa	26 Series	20/22 Series
206-4	3/16	5	0.52	13	3000	21	3	75	0.15	0,22	28	95	•	•
206-5	1/4	6,3	0.58	15	3000	21	3-3/8	85	0.18	0,27	28	95	•	•
206-6	5/16	8	0.68	17	2250	15,7	3-1/2	90	0.23	0,34	28	95	•	•
206-8	13/32	10	0.77	20	2000	14	3-1/2	90	0.27	0,40	28	95	•	•
206-10	1/2	12,5	0.92	23	1750	12,2	4	100	0.37	0,55	28	95	•	•
206-12	5/8	16	1.08	27	1500	10,5	4	100	0.40	0,60	28	95	•	•
206-16	7/8	22	1.23	31	800	5,6	4	100	0.46	0,68	20	68	•	•
206-20	1-1/8	29	1.50	38	625	4,3	5-1/2	140	0.51	0,76	20	68	•	•
206-24	1-3/8	35	1.75	44	500	3,5	7-1/2	190	0.68	1,01	15	51	•	•
206-32	1-13/16	46	2.22	56	350	2,4	13-1/4	335	0.89	1,32	11	37	•	•
206-40	2-3/8	60	2.88	73	350	2,4	24	610	1.31	1,95	11	37	•	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR°.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid, blue.

Temperature Range: -55°F to +302°F (-48°C to +150°C).

Fittings: 26 Series - pg. B-9.
20 Series - pg. B-125.
22 Series - pg. B-143.

- See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and 266 hose.
- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

Hose Products Division
Parker Hannifin Corporation
Wickliffe, Ohio
www.parkerhose.com