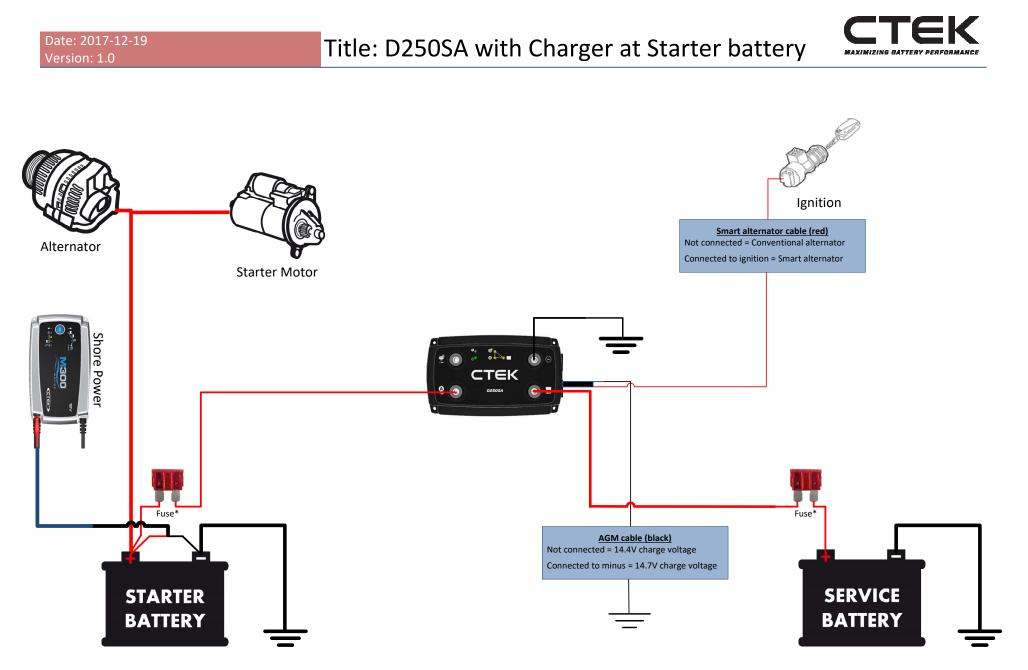


* Fuse recomended. Please verify directive for applicable installation regarding fuses



General Information		
Starter battery: Typically 55Ah to 100Ah for automotive applications. A start battery should never be deeply discharged.	Alternator: If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ingnition.	Charge voltage: You can choose between 14.4V and 14.7V (AGM) on D250SA. If you not connect the Black AGM cable you get 14.4V If you connect the Black AGM cable to minus you get 14.7V.
Service battery: Size 40Ah to 300Ah. If Service battery is bigger than 100Ah, a SMARTPASS 120 is recommended together with D250SA to shorten the charging time. SMARTPASS 120 is also recommended if Service battery is less than 100Ah but have consumption during drivning. Batteries are connected in parallel to increase capacity (Ah). Suitable deep cycle batteries should be used.	Wiring: Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring. A thick wire generate less voltage drop than a thinner wire at high current.	
D250SA: Install according to instruction manual.	Fuses: If fuses are used, mount the fuses as close to each battery as possible. Suitable fuse size: D250SA: 30A Please verify directive for applicable installation regarding fuses.	
Temperature sensor: Attach the temperature sensor onto the service battery.		

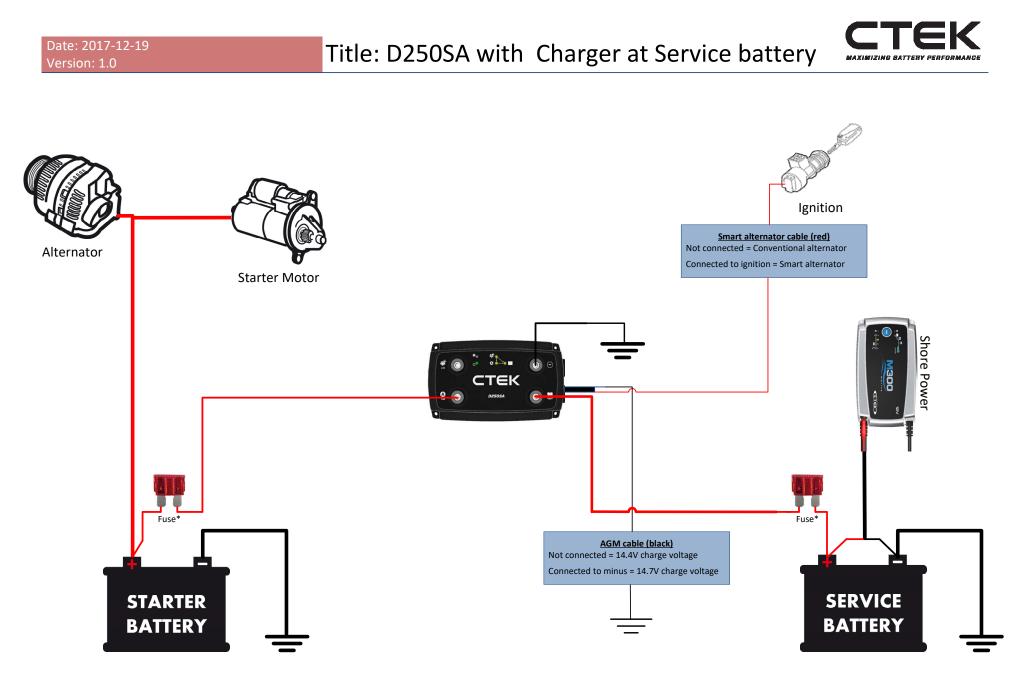


* Fuse recomended. Please verify directive for applicable installation regarding fuses

Title: D250SA with Charger at Starter battery



	General Information	
Starter battery: Typically 55Ah to 100Ah for automotive applications. A start battery should never be deeply discharged.	Alternator: If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ingnition.	Battery charger (AC): When regular discharge on both Service and Starter battery, a Battery charger required. Connect the Battery charger on Starter battery and both Starter and Service battery will be individually recharged from the Battery charger and D250SA. Select a charger that is suitable regarding the capacity of
Service battery: Size 40Ah to 300Ah. If Service battery is bigger than 100Ah, a SMARTPASS is recommended together with D250SA to shorten the charging time. SMARTPASS is also recommended if Service battery is less than 100Ah but have consumption during drivning. Batteries are connected in parallel to increase capacity (Ah). Suitable deep cycle batteries should be used.	Wiring: Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring. A thick wire generate less voltage drop than a thinner wire at high current.	the battery bank and also the requirement of recharge time. A typical charger is MXS25 or M300.
D250SA: Install according to instruction manual.	Fuses: If fuses are used, mount the fuses as close to each battery as possible. Suitable fuse size: D250SA: 30A Please verify directive for applicable installation regarding fuses.	
Temperature sensor: Attach the temperature sensor onto the service battery.	Charge voltage: You can choose between 14.4V and 14.7V (AGM) on D250SA. If you not connect the Black AGM cable you get 14.4V If you connect the Black AGM cable to minus you get 14.7V.	

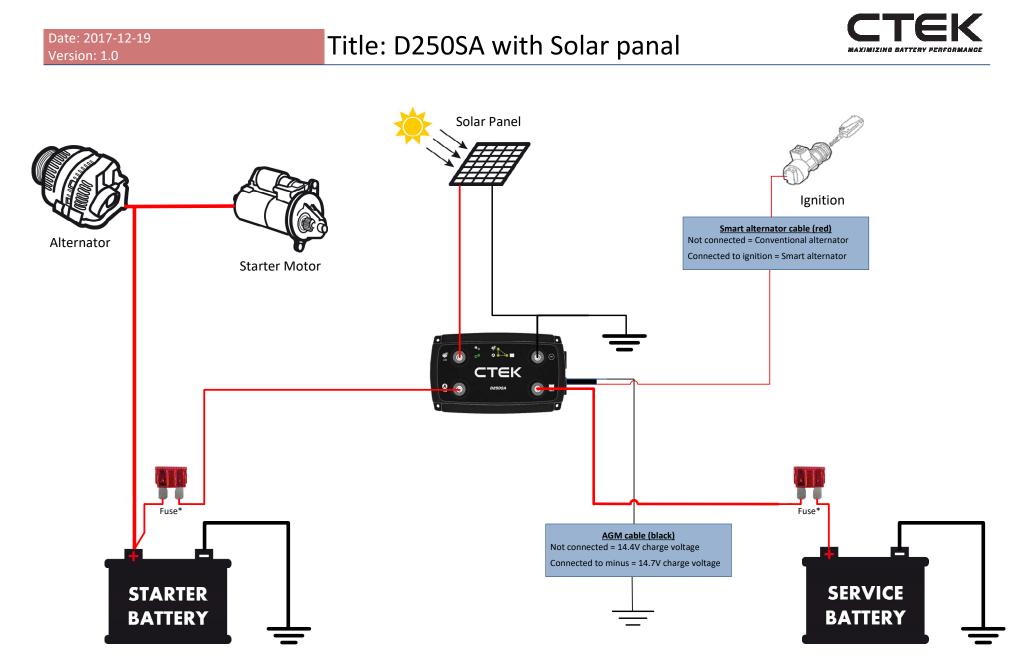


* Fuse recomended. Please verify directive for applicable installation regarding fuses

Title: D250SA with Charger at Service battery



General Information		
Starter battery: Typically 55Ah to 100Ah for automotive applications. A start battery should never be deeply discharged.	Alternator: If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ingnition.	Battery charger (AC): When regular discharge on Service battery but not on the Starter battery, a Battery charger is required. Connect the Battery charger on Service battery. Select a charger that is suitable regarding the capacity of the battery bank and also the requirement of recharge time. A typical charger is MXS25 or M300.
Service battery: Size 40Ah to 300Ah. If Service battery is bigger than 100Ah, a SMARTPASS 120 is recommended together with D250SA to shorten the charging time. SMARTPASS 120 is also recommended if Service battery is less than 100Ah but have consumption during drivning. Batteries are connected in parallel to increase capacity (Ah). Suitable deep cycle batteries should be used.	Wiring: Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring. A thick wire generate less voltage drop than a thinner wire at high current.	
D250SA: Install according to instruction manual.	Fuses: If fuses are used, mount the fuses as close to each battery as possible. Suitable fuse size: D250SA: 30A Please verify directive for applicable installation regarding fuses.	
Temperature sensor: Attach the temperature sensor onto the service battery.	Charge voltage: You can choose between 14.4V and 14.7V (AGM) on D250SA. If you not connect the Black AGM cable you get 14.4V If you connect the Black AGM cable to minus you get 14.7V.	

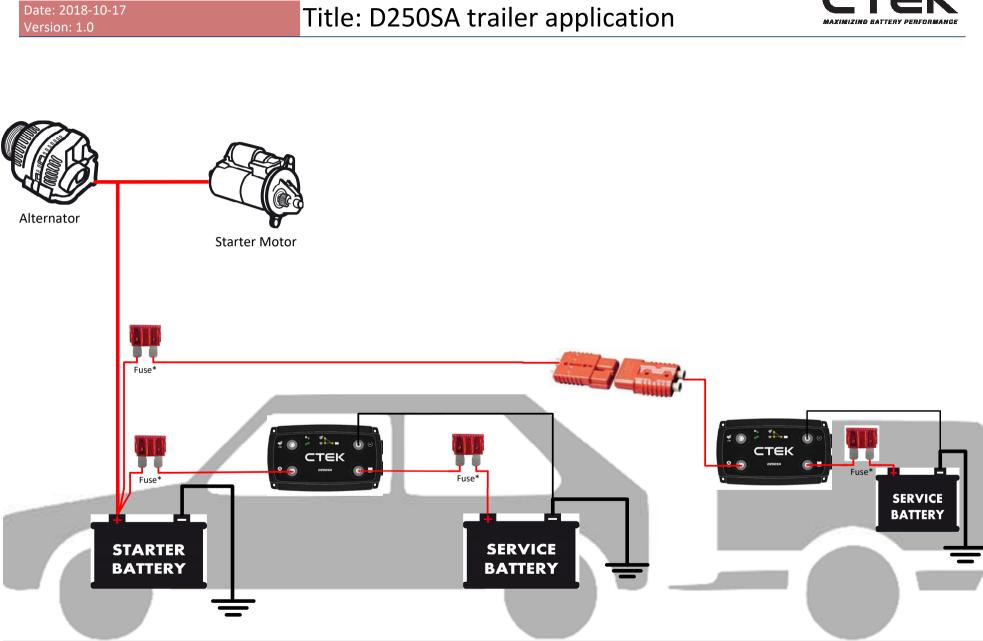


* Fuse recomended. Please verify directive for applicable installation regarding fuses

Title: D250SA with Solar panal



	General Information	
Starter battery: Typically 55Ah to 100Ah for automotive applications. A start battery should never be deeply discharged.	Alternator: If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ingnition.	
Service battery: Size 40Ah to 300Ah. If Service battery is bigger than 100Ah, a SMARTPASS 120 is recommended together with D250SA to shorten the charging time. SMARTPASS 120 is also recommended if Service battery is less than 100Ah but have consumption during drivning. Batteries are connected in parallel to increase capacity (Ah). Suitable deep cycle batteries should be used.	Wiring: Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring. A thick wire generate less voltage drop than a thinner wire at high current.	Din forhandler
D250SA: Install according to instruction manual.	Fuses: If fuses are used, mount the fuses as close to each battery as possible. Suitable fuse size: D250SA: 30A Please verify directive for applicable installation regarding fuses.	GACELI
Temperature sensor: Attach the temperature sensor onto the service battery.	Charge voltage: You can choose between 14.4V and 14.7V (AGM) on D250SA. If you not connect the Black AGM cable you get 14.4V If you connect the Black AGM cable to minus you get 14.7V.	The right battery



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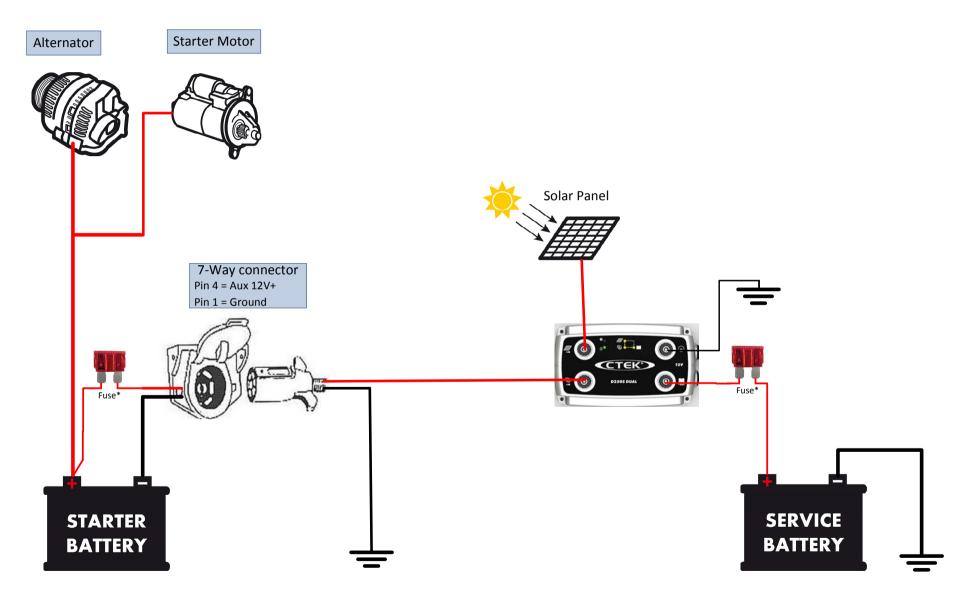
* Fuse recomended. Please verify directive for applicable installation regarding fuses



	General Information	
Starter battery: Typically 55Ah to 100Ah for automotive applications. A start battery should never be deeply discharged.	Alternator: If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ingnition.	Charge voltage: You can choose between 14.4V and 14.7V (AGM) on D250SA. If you not connect the Black AGM cable you get 14.4V If you connect the Black AGM cable to minus you get 14.7V.
Service battery: Size 40Ah to 300Ah. If Service battery is bigger than 100Ah, a SMARTPASS 120 is recommended together with D250SA to shorten the charging time. SMARTPASS 120 is also recommended if Service battery is less than 100Ah but have consumption during drivning. Batteries are connected in parallel to increase capacity (Ah). Suitable deep cycle batteries should be used.	Wiring: Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring. A thick wire generate less voltage drop than a thinner wire at high current.	
D250SA: Install according to instruction manual.	Fuses: If fuses are used, mount the fuses as close to each battery as possible. Suitable fuse size: D250SA: 30A Please verify directive for applicable installation regarding fuses.	
Temperature sensor: Attach the temperature sensor onto the service battery.		

Title: Liftgate DC/DC charger



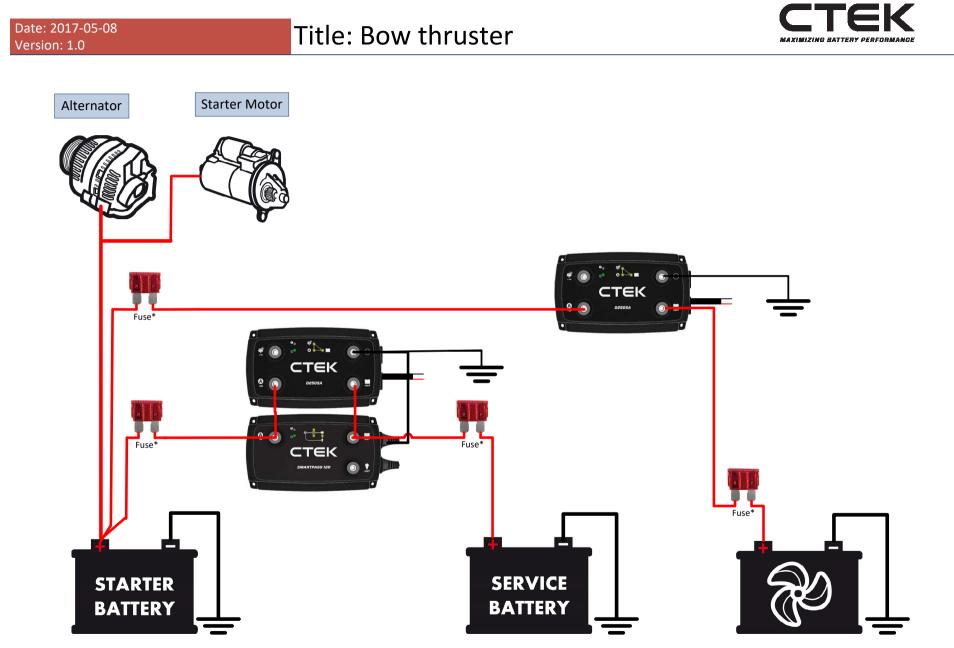


* Fuse recomended. Please verify directive for applicable installation regarding fuses

Title: Liftgate DC/DC charger



	General Information
Wiring: Input: Up to 30th = AWG 8. Up to 60th = AWG 4 Output : AWG 10. Max 6th	
Negative: Up to 30th = AWG 8. Up to 60th = AWG 4. Or connect to groun/chassis.	
Fuses: Mount the fuses as close to each battery as possible. Suitable fuse size: 30A	
Temperature sensor: Attach the temperature sensor onto the service battery.	



* Fuse recomended. Please verify directive for applicable installation regarding fuses

Date: 2017-05-08

Version: 1.0



General Information		
Starter battery: Typically 55Ah to 100Ah for automotive applications. A start battery should never be deeply discharged.	SMARTPASS 120: Install according to instruction manual.	Fuses: If fuses are used, mount the fuses as close to each battery as possible. Suitable fuse size: D250SA: 30A D250SA and SMARTPASS 120: 300A Please verify directive for applicable installation regarding fuses.
Service battery: Size: 40Ah to 800Ah. (D250SA and SmartPass 120) Batteries are connected in parallel to increase capacity (Ah). Suitable deep cycle batteries should be used.	Wiring: Please see instruction manual for suitable dimensions. Please verify directive for applicable installation regarding wiring. A thick wire generate less voltage drop than a thinner wire at high current.	Charge voltage: You can choose between 14.4V and 14.7V (AGM) on D250SA. If you not connect the Black AGM cable you get 14.4V If you connect the Black AGM cable to minus you get 14.7V.
Bow thruster battery: Typically 55Ah to 100Ah with high CCA (cold cranking amps) a Starter battery or equivalent. A start battery should never be deeply discharged.	Alternator: If the alternator is a "smart alternator" that can adjust voltage level by the engine control module or similar. To get D250SA support a Smart alternator you connect the Red Smart Alternator cable to the ingnition.	
D250SA: Install according to instruction manual.	Temperature sensor: Attach the temperature sensor onto the service battery.	