

* Fuse recommended. 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

Service battery:

Size 28Ah to 800Ah.

Batteries are connected in parallel to increase capacity (Ah).

Suitable deep cycle batteries should be used.

Temperature sensor:

Attach the temperature sensor onto the service battery.

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.

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.

Consumers:

Critical consumers are connected directly to the service battery bank. A critical consumer could be VHF radio.

Non critical consumers are connected directly to the consumer output terminal at SMARTPASS 120. If battery voltage reach a critical low level, the consumer output terminal is deactivated to protect the Service battery.

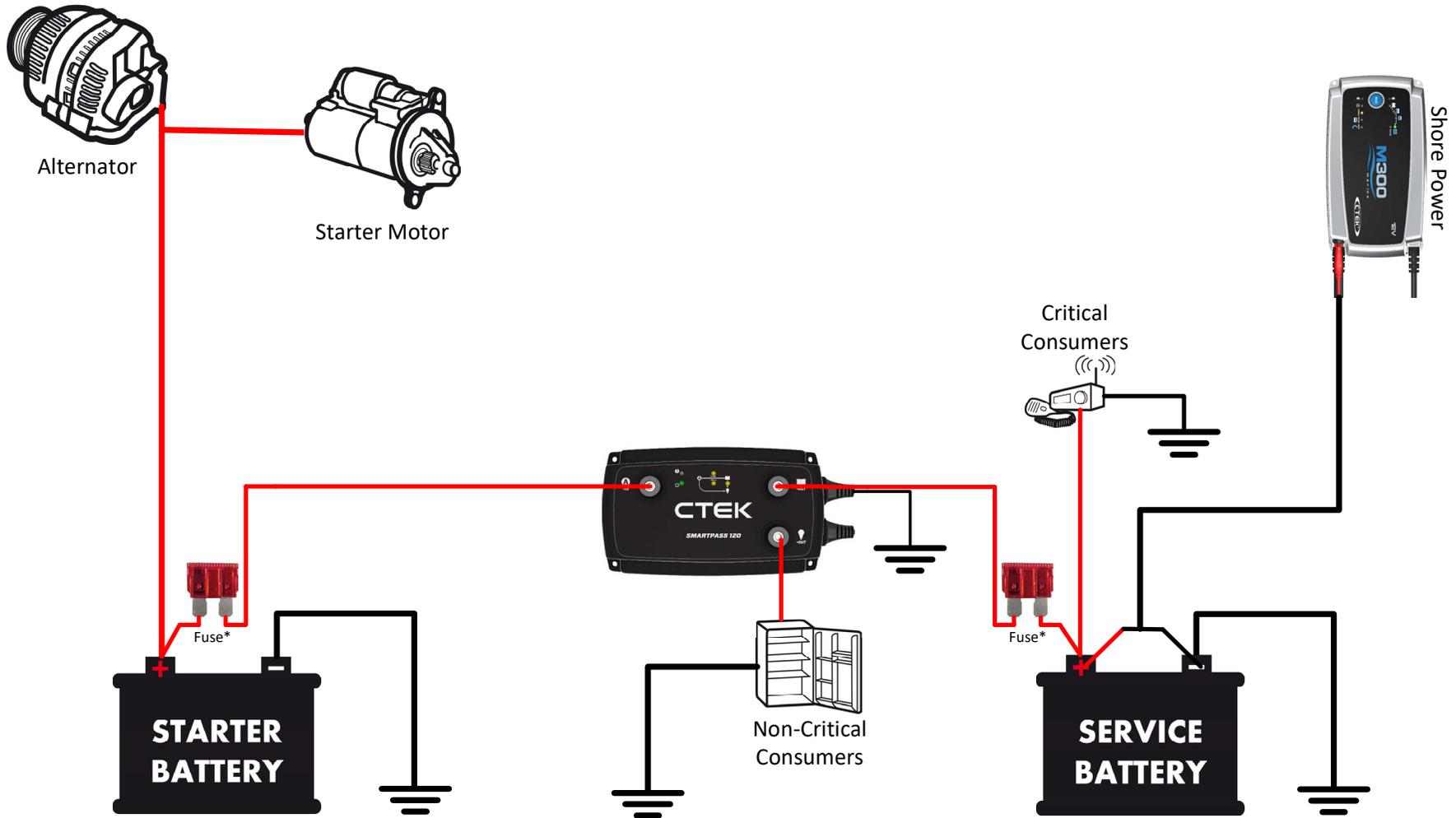
Non critical consumers receive current from the alternator instead of the Service battery during driving, to make the charging of the Service battery faster

SMARTPASS 120:

Install according to instruction manual.

Start assistance.

SMARTPASS 120 automatically connects the service battery to the starter battery to assist, if the starter battery on its own is unable to start the engine. After the start assistance function has been activated, SMARTPASS 120 will display a fault indication until starting has been achieved without using the start assistance function.



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Service battery:

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Suitable deep cycle batteries should be used.

Temperature sensor:

Attach the temperature sensor onto the service battery.

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.

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.

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.

Consumers:

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Non critical consumers are connected directly to the consumer output terminal at SMARTPASS 120. If battery voltage reach a critical low level, the consumer output terminal is deactivated to protect the Service battery.

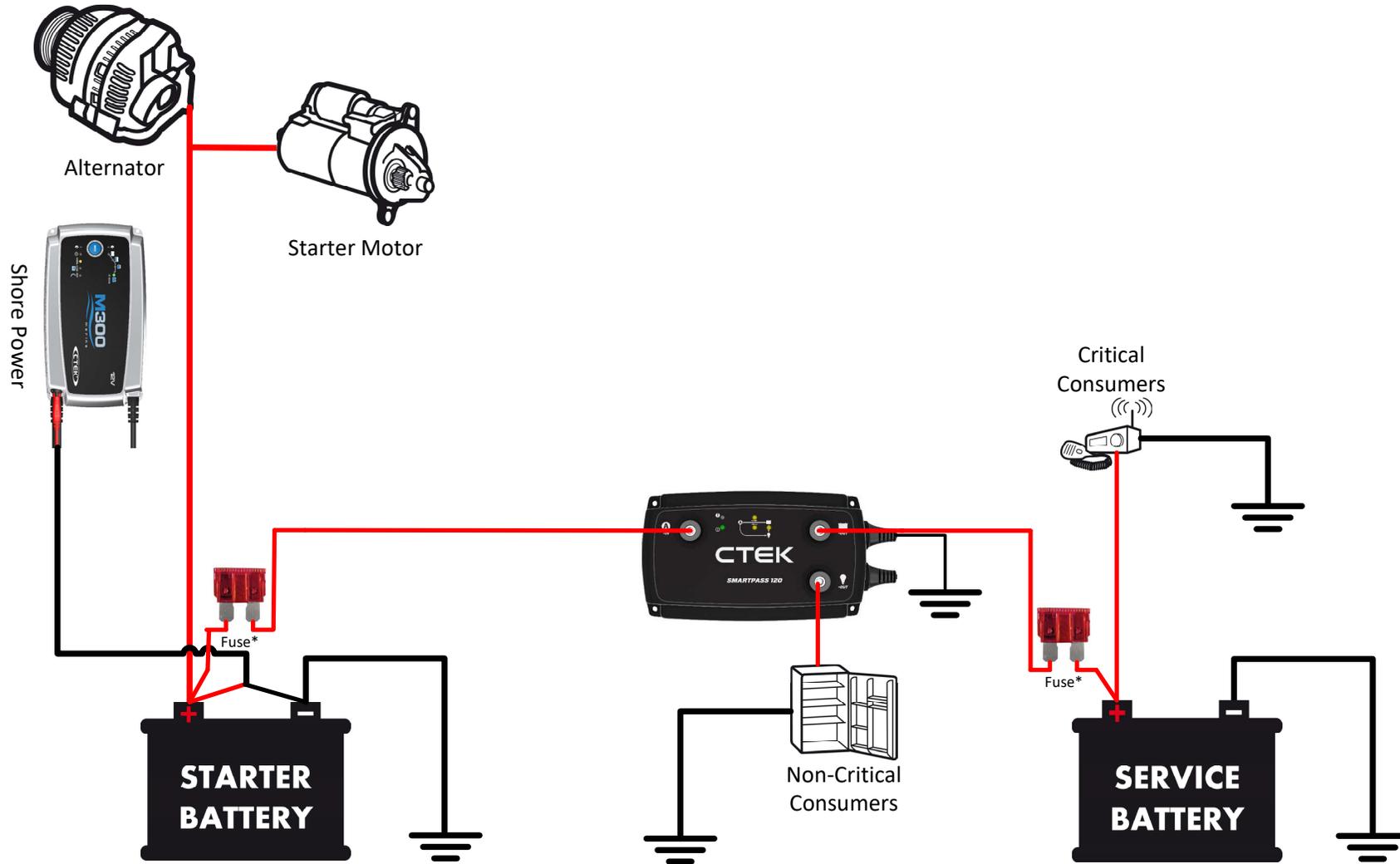
Non critical consumers receive current from the alternator instead of the Service battery during driving, to make the charging of the Service battery faster

SMARTPASS 120:

Install according to instruction manual.

Start assistance.

SMARTPASS 120 automatically connects the service battery to the starter battery to assist, if the starter battery on its own is unable to start the engine. After the start assistance function has been activated, SMARTPASS 120 will display a fault indication until starting has been achieved without using the start assistance function.



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Service battery:

Size 28Ah to 800Ah.

Batteries are connected in parallel to increase capacity (Ah).

Suitable deep cycle batteries should be used.

Temperature sensor:

Attach the temperature sensor onto the service battery.

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.

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.

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 D250S DUAL/SMARTPASS.

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.

Consumers:

Critical consumers are connected directly to the service battery bank. A critical consumer could be VHF radio.

Non critical consumers are connected directly to the consumer output terminal at SMARTPASS 120. If battery voltage reach a critical low level, the consumer output terminal is deactivated to protect the Service battery.

Non critical consumers receive current from the alternator instead of the Service battery during driving, to make the charging of the Service battery faster

SMARTPASS 120:

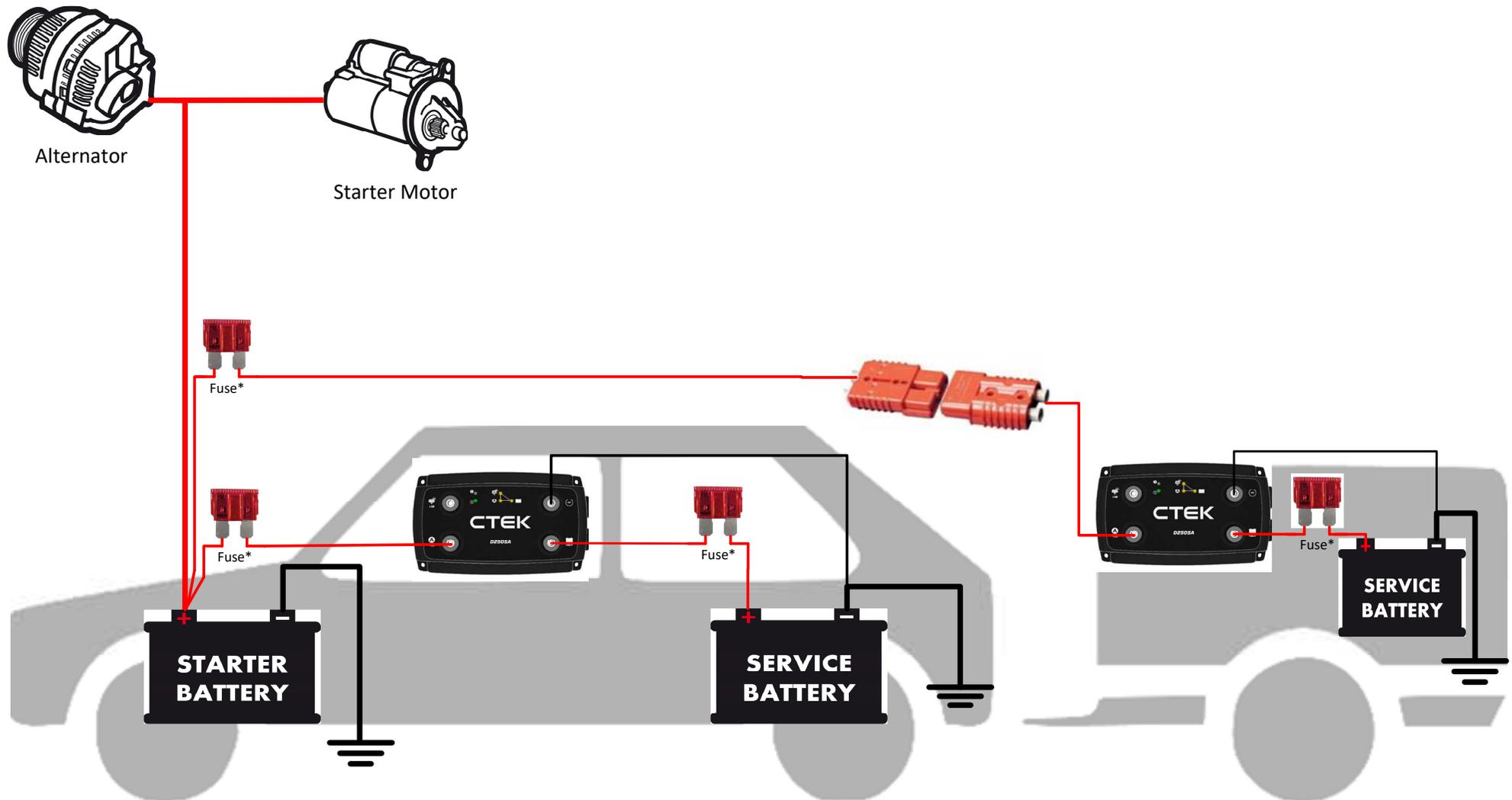
Install according to instruction manual.

Start assistance.

SMARTPASS 120 automatically connects the service battery to the starter battery to assist, if the starter battery on its own is unable to start the engine. After the start assistance function has been activated, SMARTPASS 120 will display a fault indication until starting has been achieved without using the start assistance function.

Din forhandler





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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 ignition.

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 driving. 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:

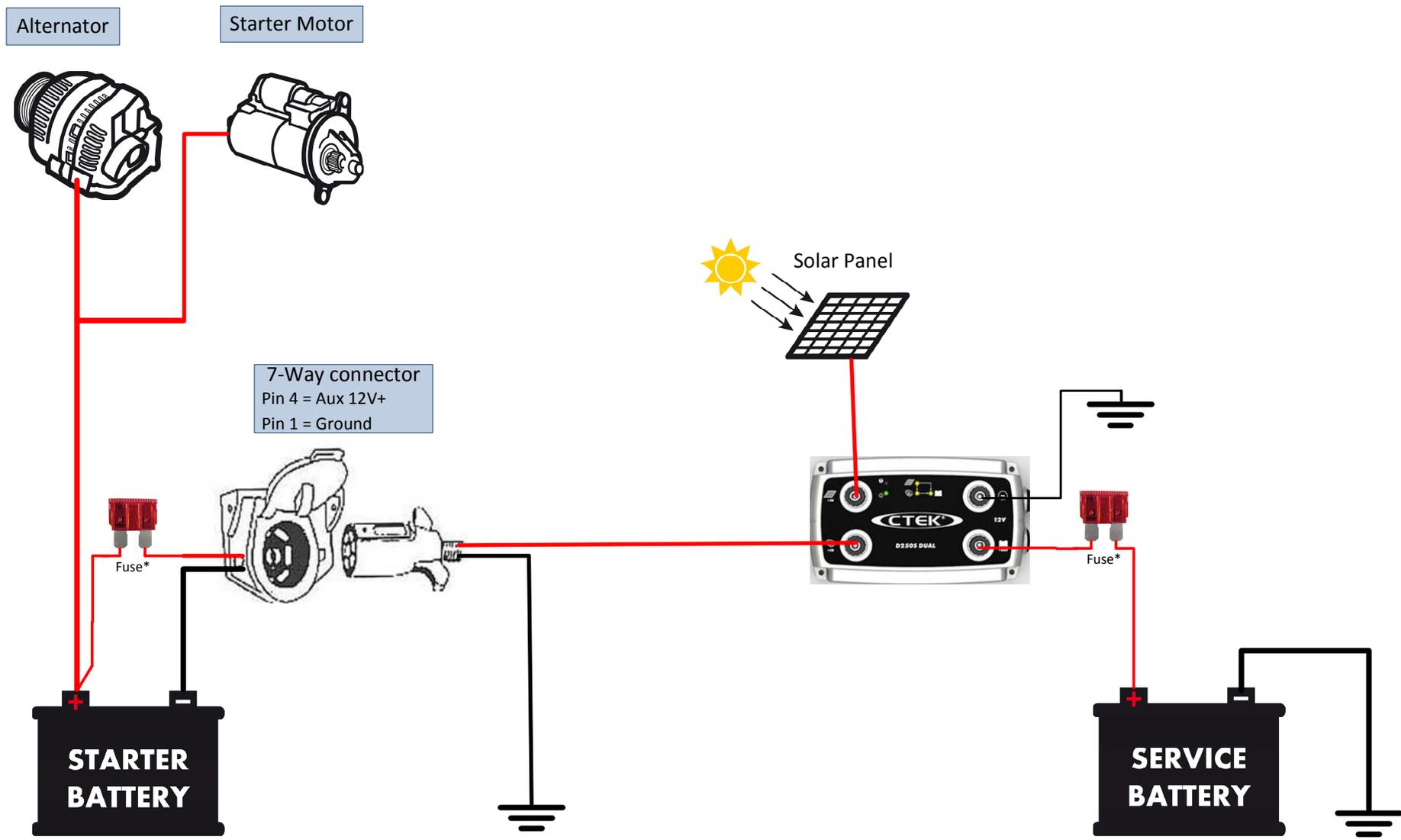
Install according to instruction manual.

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.



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Date: 2016-04-18
Version: 1.0

Title: Liftgate DC/DC charger



General Information

Wiring:

Input: Up to 30th = AWG 8. Up to 60th = AWG 4
Output : AWG 10. Max 6th

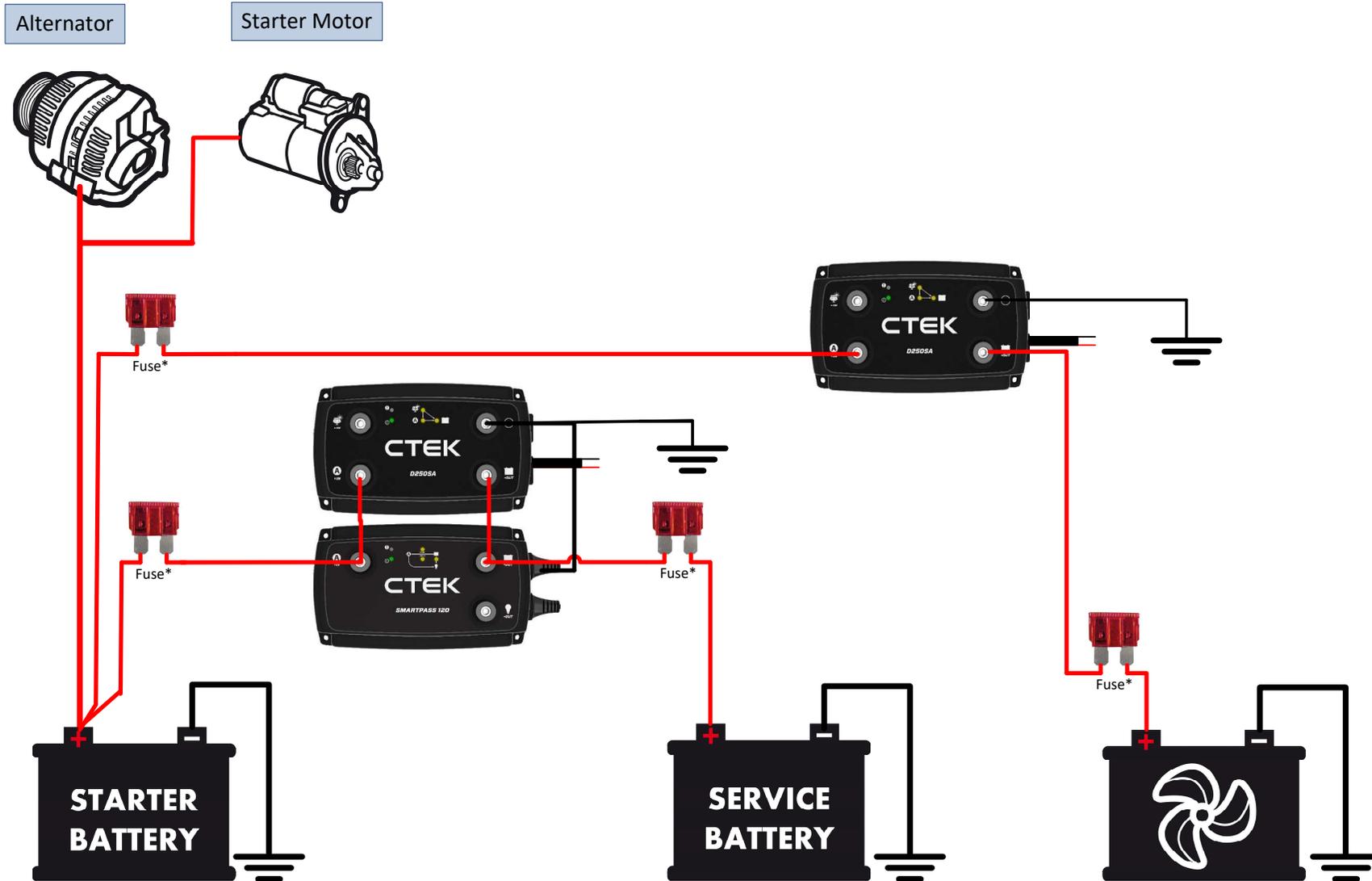
Negative: Up to 30th = AWG 8. Up to 60th = AWG 4. Or
connect to groun/chassis.

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.



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General Information

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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 ignition.

D250SA:

Install according to instruction manual.

Temperature sensor:

Attach the temperature sensor onto the service battery.