

### CHONGQING HUANSONG SCIENCE AND TECHNOLOGY INDUSTRIAL CO., LTD.

Executive Order: U-M-202-0141
New Off-Highway Recreational Vehicles/Engines
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Pursuant to the authority vested in California Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The engine and exhaust emission control systems produced by the manufacturer are certified as described below for off-highway recreational vehicles. Production vehicles shall be in all material respects the same as those for which certification is granted. The manufacturer shall ensure that character "C" or "3" is not used in the eighth (8th) position of the vehicle identification number (VIN) of all vehicles in the engine family listed below. Violation of this VIN provision may result in incorrect registration of the vehicles.

## **ENGINE FAMILY INFORMATION**

Model Year: 2025 Engine Family: SHSNX.546USV Vehicle Category: OFRUV Fuel Type(s): GAS Strokes per cycle: 4 Engine(cc): 471, 546

Special Features & Exhaust Emission Control Systems 1: SFI, TWC, HO2S

Following are the certification emission levels, exhaust emission standards or designated standard as applicable, and evaporative emission standards or EFEL (Evaporative Family Emissions Limit) as applicable, for this engine family/evaporative family. The designated standard and/or EFEL, as applicable, shall be shown on the permanent emission control label. Vehicles within this engine family shall not discharge any crankcase emissions into the ambient atmosphere in conformance with Title 13, California Code of Regulations, Section (13 CCR) 2412(i).

# Exhaust Emissions (g/km):

<u>Pollutant</u>	<u>CERT</u>	<u>STD</u>	DES-STD
HC	0.3	1.0	*
HC+NOx	*	*	*
CO	3.3	15.0	*

## **Evaporative Emissions:**

Evaporative Family	CERT (TOG g/day)	STD (TOG g/day)	EFEL (TOG g/day)	Evap Compliance Option
SHSNU0050UTV	0.688	1	*	72-Hour Diurnal Test

BE IT FURTHER RESOLVED: Certification to the designated standard listed above, as applicable, is subject to the following terms, limitations and conditions. The designated standard shall be the exhaust limit for this engine family for the model year and cannot be changed by the manufacturer. It serves as the exhaust standard applicable to this engine family for determining engine family compliance, and compliance with the corporate average standard in accordance with 13 CCR 2412(b), 13 CCR 2412(d), and 13 CCR 2414.

BE IT FURTHER RESOLVED: The listed vehicles shall comply with 13 CCR 1965 and 13 CCR 2413 (emission control labels). The vehicles shall also be subject to 13 CCR 2414 (enforcement and recall provisions).

BE IT FURTHER RESOLVED: For the off-highway recreational vehicles listed above, the manufacturer has submitted materials to demonstrate certification compliance with the evaporative emission requirements in 13 CCR 2412 (b)(2), as applicable.

BE IT FURTHER RESOLVED: For the off-highway recreational vehicles listed on Attachment A, the manufacturer has submitted materials to demonstrate certification compliance with the evaporative emission requirements in 13 CCR 2418 (Evaporative Emission Standard and Test Procedures), 13 CCR 2419 (emission control labels), and 13 CCR 2419.1 and 13 CCR 2419.2 (Defect Warranty, and Evaporative Emissions Control System Warranty Statement, respectively). The vehicles shall also be subject to 13 CCR 2419.3 (enforcement and recall provisions).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Vehicles in this family that are produced for any other model-year are not covered by this Executive Order.

See Attachment A for vehicle descriptions.

Executed on this 9th day of July 2024.

Robin U. Lang Robin U. Lang, Chief

**Emissions Certification and Compliance Division** 

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# ATTACHMENT A

#### VEHICLE MODELS INFORMATION

HISUN	<u>Make</u>	<u>Model</u>	<u>(A)</u>	<u>(B)</u>	<u>(C)</u>	<u>(D)</u>	<u>(E)</u>	<u>(F)</u>	<u>(G)</u>
HISUN         SECTOR 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         RK PERFORMANCE 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         HS550UTV-2         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER MX 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           HISUN         AXIS 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           HISUN         AXIS 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-3         OFRUV         546         20.2         780         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0	HISUN	HS550UTV	OFRUV				CVT	1	SHSNU0050UTV
HISUN         RK PERFORMANCE 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         HS550UTV-2         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER MX 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER MX 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER M550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER M550         OFRUV         546         20.2         780         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-3         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT	HISUN	VECTOR 550	OFRUV	546	20.2	820	CVT	1	SHSNU0050UTV
HISUN         HS550UTV-2         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER MX 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           HISUN         AXIS 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER M550         OFRUV         546         20.2         780         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-3         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1	HISUN	SECTOR 550	OFRUV	546	20.2	820	CVT	1	SHSNU0050UTV
CUB CADET         CHALLENGER 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER MX 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           HISUN         AXIS 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER M550         OFRUV         546         20.2         780         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-3         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT         1	HISUN	RK PERFORMANCE 550	OFRUV	546	20.2	820	CVT	1	SHSNU0050UTV
CUB CADET         CHALLENGER MX 550         OFRUV         546         20.2         850         CVT         1         SHSNU0050UTV           HISUN         AXIS 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER M550         OFRUV         546         20.2         780         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-3         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         <	HISUN	HS550UTV-2	OFRUV	546	20.2	850	CVT	1	SHSNU0050UTV
HISUN	CUB CADET	CHALLENGER 550	OFRUV	546	20.2	850	CVT	1	SHSNU0050UTV
CUB CADET         CHALLENGER M550         OFRUV         546         20.2         780         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-3         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV<	CUB CADET	CHALLENGER MX 550	OFRUV	546	20.2	850	CVT	1	SHSNU0050UTV
HISUN         HS500UTV-3         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV     <	HISUN	AXIS 550	OFRUV	546	20.2	820	CVT	1	SHSNU0050UTV
CUB CADET         CHALLENGER 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV     <	CUB CADET	CHALLENGER M550	OFRUV	546	20.2	780	CVT	1	SHSNU0050UTV
HISUN         HS500UTV-4         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         RK PERFORMANCE 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV     <	HISUN	HS500UTV-3	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         HS500UTV-5         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         RK PERFORMANCE 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV     <	CUB CADET	CHALLENGER 500	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         RK PERFORMANCE 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	HS500UTV-4	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         HS500UTV-6         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	HS500UTV-5	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         VECTOR 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	RK PERFORMANCE 500	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         AXIS 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	HS500UTV-6	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         VIPER 550         OFRUV         546         20.2         820         CVT         1         SHSNU0050UTV           HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	VECTOR 500	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         BAD BOY 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV           HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	AXIS 500	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN         BACK40 500         OFRUV         471         17.4         740         CVT         1         SHSNU0050UTV           HISUN         BACK40 550         OFRUV         546         20.2         800         CVT         1         SHSNU0050UTV	HISUN	VIPER 550	OFRUV	546	20.2	820	CVT	1	SHSNU0050UTV
HISUN BACK40 550 OFRUV 546 20.2 800 CVT 1 SHSNU0050UTV	HISUN	BAD BOY 550	OFRUV	546	20.2	800	CVT	1	SHSNU0050UTV
	HISUN	BACK40 500	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV
HISUN VIPER 500 OFRUV 471 17.4 740 CVT 1 SHSNU0050UTV	HISUN	BACK40 550	OFRUV	546	20.2	800	CVT	1	SHSNU0050UTV
	HISUN	VIPER 500	OFRUV	471	17.4	740	CVT	1	SHSNU0050UTV

- (A) Vehicle Category, (B) Engine Displacement in cubic centimeter, (C) Rated Power in kilowatt, (D) EIM in kilograms,
- (E) Transmission Type, (F) Exhaust ECS, (G) Evaporative Family

#### **ABBREVATIONS:**

GENERAL: 13 CCR 1958, etc.=Title 13, California Code of Regulations, Section 1958, etc.; 40 CFR86.401-90, etc.=Title 40, Code of Federal Regulations, Section 86.401-90, etc.;

HIGHWAY MOTORCYCLE & OFF-HIGHWAY RECREATIONAL VEHICLE CATEGORIES: ATV or ATVA=all terrain vehicle conforming to the California definition in 13 CCR 2411(a); ATVB=Off-highway or non-road recreational vehicles that meet USEPA definition for an all-terrain vehicle or USEPA definition for an off-road utility vehicle and, in addition, meet one or more CARB definitions for an all terrain vehicle, off-road utility vehicle, off-road sport vehicle, and/or sand car; EGC=electric golf cart; HMC=on-road or highway motorcycle; HMC-IA / -IB=HMC below 50 cc / 50 cc to below 170 cc; HMC II=HMC 170 cc to below 280 cc; HMC-III=HMC 280 cc and above; OFMC=off-road motorcycle; SC=sand car above 1000 cc; OFRSV=off-road sport vehicle, including otherwise sand car but with 1000 cc engine or smaller; OFRUV=off-road utility vehicle;

FUEL TYPES: CLNG=natural gas in either CNG or LNG form; CNG / LNG=compressed / liquefied natural gas; DF\_CNG/GAS=dual-fuel CNG or gasoline, etc; DSL=diesel; GAS=gasoline; HYD=hybrid; LPG=propane or liquefied petroleum gas;

EMISSION CONTROL SYSTEMS & SPECIAL FEATURES: (prefix) 2, 3, 4=2, 3, or 4 catalysts, sensors, TC, SC, CAC, etc. in parallel arrangement; (parenthetic suffix) (2), (3), (4)=2, 3, or 4 catalysts, sensors, TC, SC, CAC, etc. in series arrangement; AIR / PAIR=secondary / pulsed air injection; CAC=charge air cooler; DFI/ IFI=direct / indirect fuel injection; EGR=exhaust gas recirculation; EGRC=EGR cooler; EM=engine modification; O2S / HO2S / WR HO2S=oxygen sensor / heated O2S / wide range HO2S; OC=oxidation catalyst; TC=turbocharger; TBI / MFI / SFI / DGI=throttle body / multi port / sequential / direct gasoline fuel injection; TRANS=transmission type; TWC=three way catalyst; SC=supercharger; TWC+OC=TWC plus OC in same container; (prefix) WU=warm-up catalyst;

CERTIFICATION EMISSION LEVELS & STANDARDS: bhp=brake hp; cc=cubic centimeter; CERT=certification emission level; CID=cubic inch displacement; CO=carbon monoxide; CO2=carbon dioxide; D+HS=diurnal plus hot soak evaporative emissions; DES\_STD=manufacturer designated standard; EIM=equivalent inertia mass; EVAP=evaporative family; FEL=family emission limit; g=gram; gal=gallon; g/bhp-hr=grams per brake horsepower-hour; g/km=grams per kilometer; g/kW-hr=grams per kilowatt-hour; g/m2-day=grams per square meter per day; g/test=grams per test; HC=(total) hydrocarbons; hp=horsepower; hr=hour; K=1000 miles; kg=kilograms; km=kilometer; kW=kilowatt; L=liter; m2=square meter; mi=mile; mg=milligram; NOX=oxides of nitrogen; NMHC=non methane hydrocarbons; PEVAP=permeation evaporative family; STD=emission standard; \*=not applicable; (superscript) o=degree (temperature); oF=degree Fahrenheit; oC=degree Celsius.