

An aerial photograph of three cars driving on a winding dirt road through a desert canyon. The lead car is a dark SUV, followed by a silver sedan, and a third car further ahead. The terrain is rugged with red rock formations and sparse vegetation. The sky is clear and blue.

Jeep

OFF-ROAD GUIDE



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SAND. DIRT. MUD. ROCKS. SNOW.

CYBERTRUCK FEATURES

CYBERTRUCK IS TOUGH ENOUGH TO GO ANYWHERE. OFF-ROAD MODE IS AN ADVANCED USER SETTING WHICH PUTS THE DRIVER IN ULTIMATE CONTROL BY DISABLING OR REDUCING TRACTION CONTROL, STABILITY CONTROL, HARDWARE PROTECTIONS AND COLLISION AVOIDANCE SAFETY FEATURES, PUTTING THE DRIVER IN ULTIMATE CONTROL.

WHAT MAKES CYBERTRUCK SO CAPABLE OFF ROAD:

- FOUR-WHEEL STEERING
- STEER-BY-WIRE
- INSTANT, LINEAR, AND PREDICTABLE TORQUE
- ADAPTIVE DAMPING
- ADJUSTABLE AIR SPRINGS
- FRONT AND REAR DIFFERENTIAL LOCKERS



FOUR-WHEEL STEERING: CYBERTRUCK HAS FOUR-WHEEL STEERING. WHEN THE DRIVER TURNS THE STEERING WHEEL, ALL FOUR WHEELS RESPOND. THIS GIVES CYBERTRUCK A TIGHTER TURNING RADIUS.

STEER-BY-WIRE: CYBERTRUCK USES STEER-BY-WIRE TECHNOLOGY, MEANING THERE IS NO PHYSICAL CONNECTION BETWEEN THE STEERING WHEEL AND TIRES, AND INSTEAD USES SENSORS TO COMMUNICATE BETWEEN THEM. AS A RESULT, STEERING FEELS MORE RESPONSIVE AND ADAPTIVE BASED ON THE TERRAIN AND DRIVING SPEED. STALLING THE MOTORS FOR AN EXTENDED TIME MAY CAUSE THEM TO OVERHEAT.

INSTANT, LINEAR, AND PREDICTABLE TORQUE: TORQUE AVAILABILITY AT ZERO SPEED IS A UNIQUE DIFFERENCE FROM COMBUSTION ENGINES AND MAKES CLIMBING OBSTACLES AND INCLINES MUCH EASIER.

ADAPTIVE DAMPING: THE COMPRESSION AND REBOUND OF THE DAMPERS ARE ADJUSTED BASED ON YOUR DRIVING MODE TO MAXIMIZE TRACTION AND COMFORT.

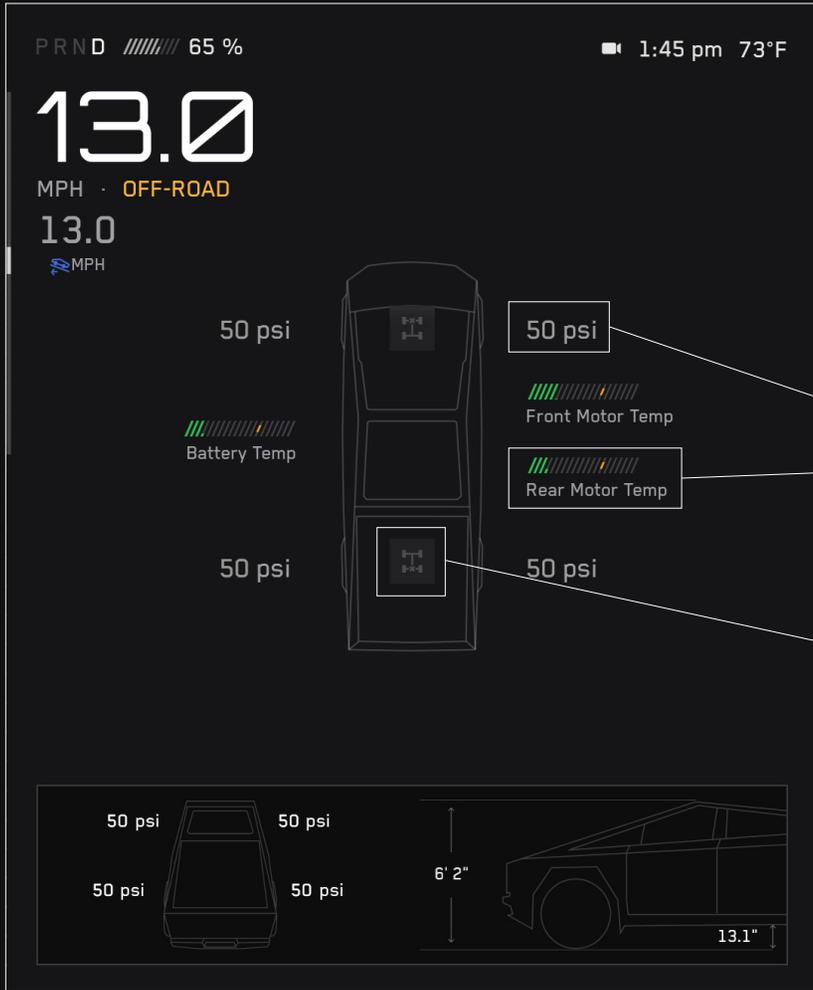
ADJUSTABLE AIR SPRINGS: ENABLE ADJUSTABLE RIDE HEIGHT. 'HIGH' SETTING REPRESENTS THE IDEAL SETTING FOR COMPRESSION AND REBOUND BALANCE. INCREASING THE RIDE HEIGHT WILL INCREASE YOUR GROUND CLEARANCE BUT COMES WITH A TRADE-OFF, REDUCING YOUR AVAILABLE COMPRESSION AND WILL MAKE THE RIDE HARSHER. IN SEVERAL RIDE HEIGHTS THE VEHICLE ENFORCES A SPEED LIMIT TO AVOID HARDWARE DAMAGE. 'VERY HIGH' (25MPH) AND 'EXTRACT' (10 MPH).

DIFFERENTIAL LOCKERS: CYBERTRUCK IS EQUIPPED WITH LOCKING DIFFERENTIALS FOR INCREASED PERFORMANCE AND STABILITY DURING LOW-TRACTION AND OFF-ROAD CONDITIONS (EX: DRIVING ON ROCKY OR DIRT ROADS).

LOCKING DIFFERENTIALS LOCK BOTH WHEELS OF AN AXLE TOGETHER, WHICH FORCES THE WHEELS TO ROTATE AT THE SAME SPEED. THIS DISTRIBUTES THE TORQUE ACROSS THE SAME AXLE BASED ON THE AVAILABLE TRACTION IN EACH WHEEL. WHEN ONE OF THE LOCKED WHEELS HAS SIGNIFICANTLY REDUCED TRACTION (ON SAND, ICE, ETC.) MORE TORQUE IS APPLIED TO THE WHEEL WITH GREATER TRACTION. IN EXTREME CASES, SUCH AS WHEN ONE WHEEL IS IN THE AIR, ALL AVAILABLE TORQUE IS SENT TO THE WHEEL ON THE GROUND WITH TRACTION. THIS DISTRIBUTION OF TORQUE HELPS THE VEHICLE CONTINUE MOVING IN LOW TRACTION ENVIRONMENTS.

NOTE: DO NOT USE LOCKING DIFFERENTIALS WHILE DRIVING ON HIGH-TRACTION SURFACES, SUCH AS ASPHALT.

WARNING: DRIVING WITH LOCKED DIFFERENTIALS MAY REDUCE VEHICLE RESPONSE TO STEERING AND CAUSE UNPREDICTABLE VEHICLE DYNAMICS.



OFF-ROAD VITALS

MONITOR THE HEALTH OF CYBERTRUCK ON THE LEFT SIDE OF THE TOUCHSCREEN

COMMON VITALS:

- **TIRE PRESSURE:** CURRENT READ OUT OF TIRE PRESSURE FROM EACH WHEEL.
- **MOTOR TEMP, AND BATTERY TEMP:** CURRENT TEMPERATURES OF THE FRONT AND REAR MOTOR(S) AND HIGH VOLTAGE BATTERY ARE DISPLAYED.
 - WHEN OPERATING WITHIN IDEAL TEMPERATURE RANGE, NO COLOR IS DISPLAYED.
 - IF PERFORMANCE IS REDUCED DUE TO TEMPERATURE, VALUE IS SHOWN IN YELLOW.
 - IF PERFORMANCE BECOMES CRITICALLY LIMITED, TEMPERATURE IS SHOWN IN RED.
- **LOCKER STATE:** DRIVE UNIT DIFFERENTIAL LOCKER STATUS.

OVERLAND VITALS:

- **ROLL/PITCH/BEARING:** DEGREE OF VEHICLE ROLL, PITCH, AND THE BEARING OF TRAVEL.
- **GROUND CLEARANCE:** CURRENT VEHICLE GROUND CLEARANCE TO THE BATTERY.

OFF-ROAD CONTROLS: OVERLAND

QUICKLY ACCESS OFF-ROAD SETTINGS ON THE RIGHT SIDE OF THE TOUCHSCREEN

CAMERA VIEWS

BACKUP CAMERA AND SIDE REPEATERS DISPLAYED. SWIPE TO SEE OTHER VIEWS.

OFF-ROAD MODE

CHOOSE BETWEEN OVERLAND AND BAJA AND CUSTOMIZE YOUR PREFERENCES.

SURFACE

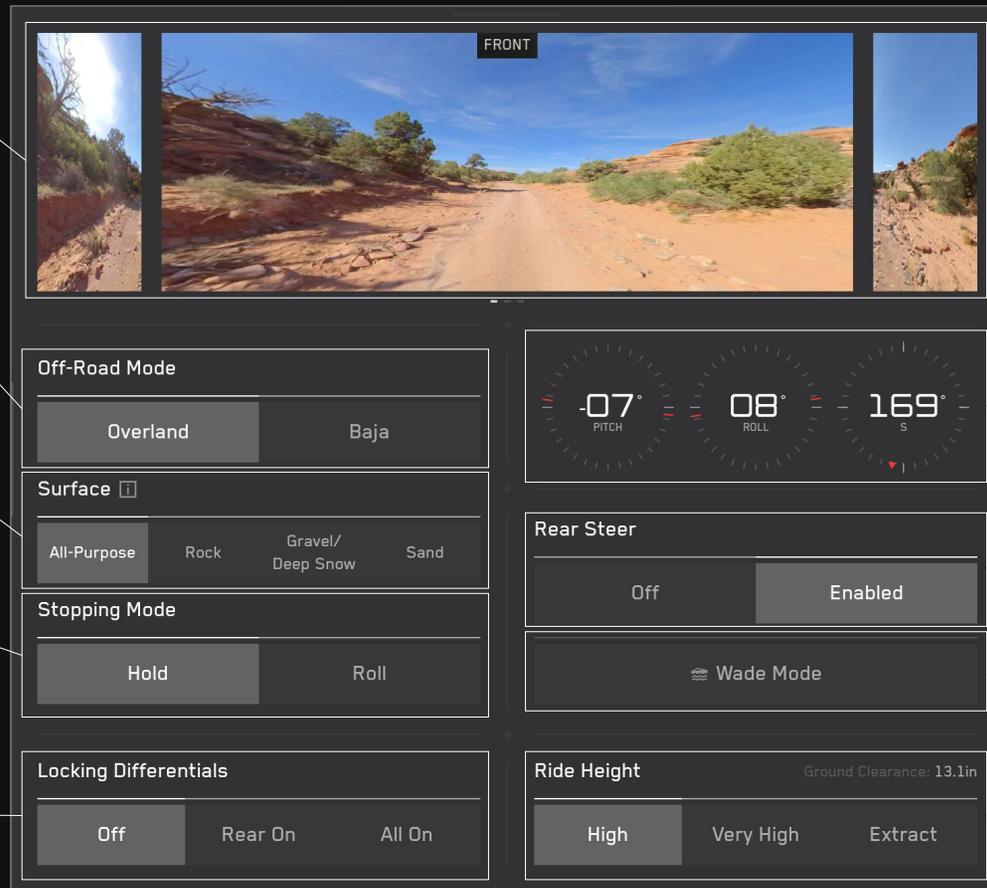
MANUALLY ADJUST THE SURFACE ON WHICH YOU ARE DRIVING.

STOPPING MODE

CHOOSE IF YOU WANT TO ROLL FREELY OR AUTOMATICALLY HOLD THE BRAKE WHEN YOU COME TO A STOP.

LOCKING DIFFERENTIALS

ENGAGE OR DISENGAGE LOCKING DIFFERENTIALS.



PITCH / ROLL / HEADING

THESE ANGLES DETERMINE HOW CAPABLE THE VEHICLE IS OF CLIMBING OVER AN OBSTACLE OR UP AN INCLINE.

REAR STEER

YOU CAN SET REAR STEER TO OFF OR AUTO. AUTO ALLOWS FOR A TIGHTER TURN RADIUS WHILE DRIVING. USEFUL FOR OFF-CAMBER DRIVING OR DRIFTING ON LOOSE SURFACES.

WADE MODE

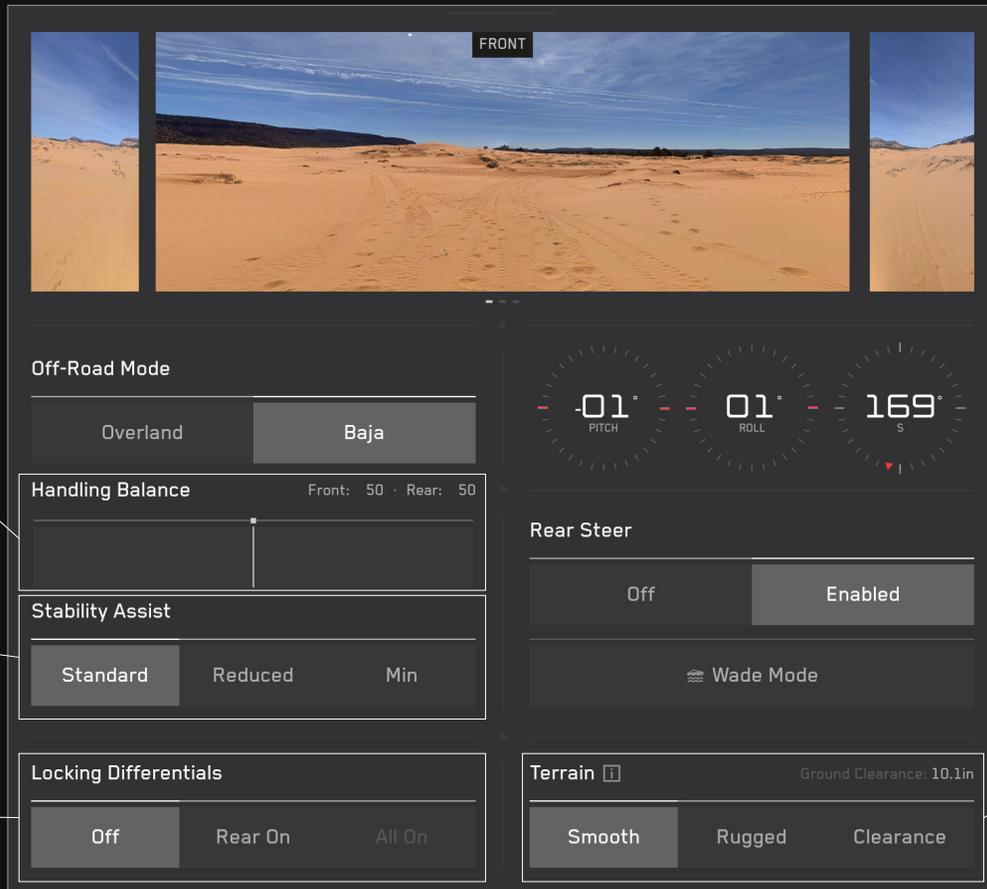
USE WHEN NAVIGATING THROUGH SHALLOW BODIES OF WATER.

RIDE HEIGHT

CUSTOMIZE YOUR VEHICLE'S RIDE HEIGHT BASED ON TERRAIN AND OTHER DRIVE SETTINGS.

OFF-ROAD CONTROLS: BAJA MODE

QUICKLY ACCESS OFF-ROAD SETTINGS ON THE RIGHT SIDE OF THE TOUCHSCREEN



HANDLING BALANCE

ADJUST LEFT FOR MORE STABLE FRONT-WHEEL DRIVE BEHAVIOR, ADJUST RIGHT FOR MORE AGILE REAR-WHEEL-DRIVE BEHAVIOR.

STABILITY ASSIST

SELECT THE DESIRED AMOUNT OF STABILITY CONTROL INTERVENTION.

LOCKING DIFFERENTIAL

ENGAGE OR DISENGAGE REAR LOCKING DIFFERENTIAL (APPLICABLE TO DUAL MOTOR ONLY).

TERRAIN

SMOOTH SETS RIDE HEIGHT TO 'MEDIUM', RUGGED SETS RIDE HEIGHT TO 'HIGH', CLEARANCE SETS RIDE HEIGHT TO 'VERY HIGH'.

BEST PRACTICES WHEN OFF-ROADING

ALWAYS BE AWARE OF YOUR SURROUNDINGS.
DRIVE SLOWLY AND CAREFULLY, STAYING WITHIN EXISTING
TRACKS. DO NOT HARM NATURE AND GIVE WAY TO WILDLIFE.

ALWAYS KEEP BOTH HANDS ON THE STEERING WHEEL.
AVOID AGGRESSIVE STEERING MANEUVERS AND BRAKE
GRADUALLY TO MAXIMIZE TRACTION.

ASSESS ANY POTENTIAL OFF-ROADING RISKS OR
OBSTACLES AHEAD. WHERE NECESSARY, GET OUT
OF CYBERTRUCK AND CHECK THE TERRAIN. USE THE
TOUCHSCREEN TO VIEW OFF-ROAD VITALS OF CYBERTRUCK.

UPON RETURNING TO NORMAL ROADS, FOR SAFETY REMOVE
ANY DEBRIS THAT MAY BE A HAZARD TO OTHER ROAD USERS
AND CHECK STEERING AND SUSPENSION COMPONENTS. FOR
EFFICIENCY RAISE TIRE PRESSURE AND REPLACE WHEEL
AERO COVERS AND FRONT FASCIA WHEEL FAIRINGS.



BEFORE YOU OFF-ROAD CHECKLIST



1. PLAN YOUR ROUTE. CONSULT MAPS AND WEATHER REPORTS. FAMILIARIZE YOURSELF WITH THE DIFFERENT TYPES OF TERRAIN YOU MAY ENCOUNTER. RESEARCH TRAILS BEFORE SETTING OUT AND BE AWARE THAT WEATHER AND ENVIRONMENTAL CONDITIONS CAN CHANGE QUICKLY AND UNEXPECTEDLY. LET SOMEONE KNOW WHERE YOU'RE GOING. DOWNLOAD MAPS WHILE YOU HAVE INTERNET ACCESS AND USE THEM OFFLINE WHEN YOU DO NOT.

2. BE PREPARED. EQUIP YOUR CYBERTRUCK WITH SUPPLIES IN CASE OF EMERGENCY, SUCH AS A SPARE TIRE, A JACK, AN AIR COMPRESSOR, WHICH ARE AVAILABLE ON THE TESLA SHOP. PLUS FOOD, WATER, CLOTHES, A CHARGED PHONE, AND A FLASHLIGHT. CONSIDER BRINGING RECOVERY GEAR SUCH AS A KINETIC ROPE, SOFT SHACKLES, TRACTION BOARDS, AND A SHOVEL.

3. EVENLY DISTRIBUTE VEHICLE LOAD. CYBERTRUCK PERFORMS BEST WHEN THE WEIGHT OF PASSENGERS AND CARGO IS DISTRIBUTED EVENLY ACROSS THE FRONT AND REAR AXLES. IF DRIVING WITH A TRAILER YOU SHOULD UNDERSTAND THE TONGUE WEIGHT CONTRIBUTION TO YOUR VEHICLE PAYLOAD AND CONSIDER LEAVING THE TRAILER PARKED WHILE YOU ENJOY THE TRAILS.

4. SECURE PASSENGERS AND CARGO. CONFIRM ALL PASSENGERS ARE WEARING SEAT BELTS PROPERLY. MAKE SURE THAT LOOSE ITEMS ARE STOWED OR SECURED. BE AWARE, TONNEAU IS NOT WATERTIGHT AND WILL NOT PREVENT DUST FROM GETTING INTO THE BED. THE FRUNK IS A DRY ZONE UNLESS SUBMERGED.

5. CHARGE UP. ENSURE YOUR VEHICLE HAS AMPLE ENERGY FOR YOUR PLANNED ROUTE. CHARGE BEFOREHAND AND LOCATE THE NEAREST SUPERCHARGER TO RECHARGE AFTERWARDS. ENERGY CONSUMPTION OVERALL WILL BE HIGHER OFF ROAD AND WILL VARY WITH TERRAIN.

6. LOWER TIRE PRESSURE IF NEEDED AT THE DESTINATION TO INCREASE TRACTION ON SURFACES SUCH AS SAND OR ON ROCKS. REDUCING TIRE PRESSURE ALLOWS TIRES TO MAKE MORE CONTACT WITH THE TERRAIN, INCREASING GRIP AND DECREASING THE RISK OF PUNCTURES. HOWEVER THIS DOES INCREASE THE RISK OF BREAKING THE SEAL ON THE TIRE SIDEWALL (DE-BEADING) IF LOADED Laterally. SUGGESTED LOWER LIMIT OF TIRE PRESSURE ON STOCK WHEELS AND TIRES IS 36 PSI.

7. REMOVE WHEEL AERO COVERS AND FRONT FASCIA WHEEL FARINGS TO PREVENT DAMAGE WHILE DRIVING OFF ROAD. REAR WHEEL ROCKER FAIRINGS CAN ALSO BE REMOVED IF DOING MORE EXTREME OFF-ROADING. VISIT THE [CYBERTRUCK SERVICE MANUAL](#) FOR REMOVAL AND REPLACEMENT INSTRUCTIONS.

OFF-ROAD SPOTTING

GROUND RULES

IN OFF-ROADING, A SPOTTER IS THE SECOND SET OF EYES TO HELP A DRIVER NAVIGATE DIFFICULT OBSTACLES. SPOTTERS ARE USUALLY IN FRONT OF THE VEHICLE AND USE HAND SIGNALS AND VOICE COMMANDS TO INDICATE WHICH WAY TO STEER THE VEHICLE AND WHICH DIRECTION TO DRIVE. HAVING A SPOTTER MAKES A HUGE DIFFERENCE IN OFF-ROADING SUCCESS RATE.

GROUND RULES:

- ONE SPOTTER AT A TIME SHOULD GUIDE THE DRIVER. AN EXCEPTION TO THIS IS WHEN A SECOND SPOTTER IS LOCATED BEHIND THE VEHICLE FOR SECONDARY ASSISTANCE.
- THE SPOTTER SHOULD ALWAYS REMAIN IN CLEAR SIGHT OF THE DRIVER.
- WHILE SPOTTING, DO NOT STAND TOO CLOSE TO THE LINE OF TRAVEL OR DIRECTLY DOWNHILL OF A VEHICLE, AS NOT ONLY A SAFETY PRECAUTION, BUT TO BE ABLE TO SEE THE WHOLE PICTURE, INCLUDING THE VEHICLE AND ANY POTENTIAL OBSTACLES.
- NON-VERBAL COMMUNICATION, ESPECIALLY PREVIOUSLY AGREED-UPON HAND SIGNALS WORK BEST, TO PREVENT DIRECTIONS FROM BEING DROWN OUT BY NOISE FROM WIND, RAIN, A RIVER, OR OTHER PEOPLE TALKING.
- SIGNALS NEED TO BE LARGE, CLEAR GESTURES THAT ARE NOT MISUNDERSTOOD FOR OTHER COMMANDS.
- THE DRIVER SHOULD DO NO MORE AND NO LESS THAN DIRECTED BY THE SPOTTER, UNTIL THE SPOTTER PROVIDES ADDITIONAL INSTRUCTION.
- WHILE INSIDE THE VEHICLE, SPOTTERS SHOULD CONTINUE TO ASSIST THE DRIVER WHILE OFF-ROADING, BY KEEPING AN EYE OUT FOR HAZARDS ON THE SIDES OF THE VEHICLE, LIKE ROCKS, TREES, OR CLIFFS.





OFF-ROAD MODES

OFF-ROAD MODES GIVE CYBERTRUCK OWNERS ACCESS TO SETTINGS AND PREFERENCES THAT ALLOW CUSTOMIZATION TO DIFFERENT ENVIRONMENTS. CUSTOMIZATIONS INCLUDE DAMPING, AIR SPRING HEIGHT AND CROSS LINKING, TRACTION, STABILITY, PEDAL SENSITIVITY, AND VEHICLE STOPPING BEHAVIORS.

OFF-ROAD CONTROLS THAT ARE AVAILABLE IN ALL MODES:

- **VEHICLE HOLD OR ROLL** – CHOOSE IF YOU PREFER THE VEHICLE TO ROLL FREELY, OR AUTOMATICALLY HOLD THE BRAKE WHEN YOU COME TO A STOP.
- **REAR STEERING ON/OFF** – DISABLES THE REAR STEERING ACTUATOR AT LOW SPEEDS. USEFUL FOR OFF-CAMBER DRIVING, OR DRIFTING ON VERY LOOSE SURFACES.
- **DOUBLE PEDAL** (ACCELERATOR + BRAKE) IS ALLOWED IN OFF-ROAD MODES FOR TIGHT DRIVE CONTROL WHEN ON A STEEP INCLINE/DECLINE.

IF YOU CANNOT ADJUST YOUR RIDE HEIGHT:

- FIRST, CHECK THAT JACK MODE IS NOT ENABLED (IT CAN AUTOMATICALLY ENABLE WHEN WHEELS LEAVE THE GROUND). IF IT IS ENABLED ACCIDENTALLY, YOU CAN DISABLE IT BY GOING TO **CONTROLS > SERVICE > JACK MODE**.
- SECOND, CHECK THAT THE COMPRESSOR IS NOT OVERHEATED. THERE WILL BE A USER-FACING ALERT IF SO. WAIT FOR IT TO COOL DOWN.

TO MAXIMIZE YOUR EFFICIENCY:

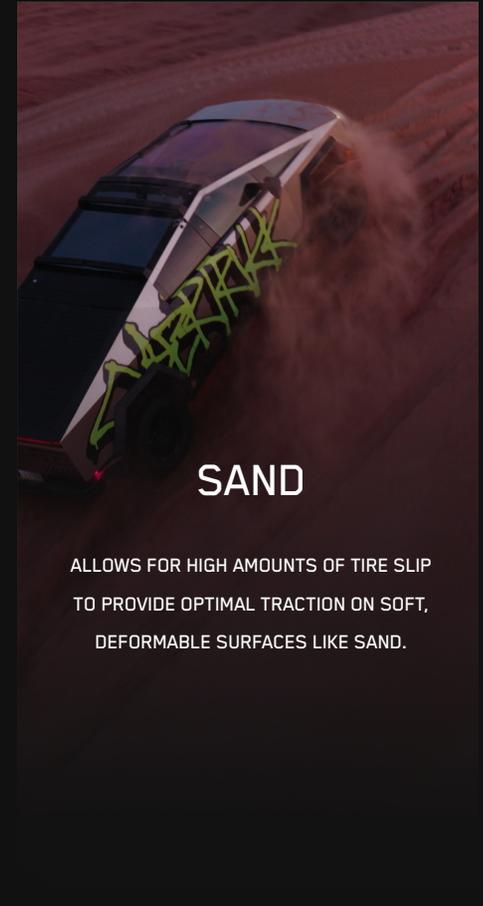
- USE BAJA MODE AND MOVE TORQUE TO BIAS TO THE PERMANENT MAGNET MOTOR. (FOR DUAL MOTOR ALL-WHEEL DRIVE THIS IS THE REAR, FOR TRI-MOTOR CYBERBEAST THIS IS THE FRONT).
- ALSO TRY TO REDUCE USE OF THE ACCELERATOR PEDAL AND SWITCH TO ROLL MODE.

DONUTS:

- WE KNOW YOU WANT TO DO THEM.
- BEST RESULTS WILL BE ACHIEVED ON A LOOSE SURFACE, IN BAJA MODE WITH HANDLING SET TO FULL OVERSTEER AND STABILITY SET TO 'MINIMUM' AND TERRAIN SLIDER SET TO 'SMOOTH'.
- ENSURE YOU HAVE SUFFICIENT CLEAR SPACE AND BE AWARE YOU WILL BE TURNING OFF STABILITY CONTROLS.
- DONUTS MAY CAUSE PROPERTY DAMAGE, SO DO NOT DO THIS ON PUBLIC PROPERTY OR DAMAGE PUBLIC TRAILS.

OVERLAND MODE

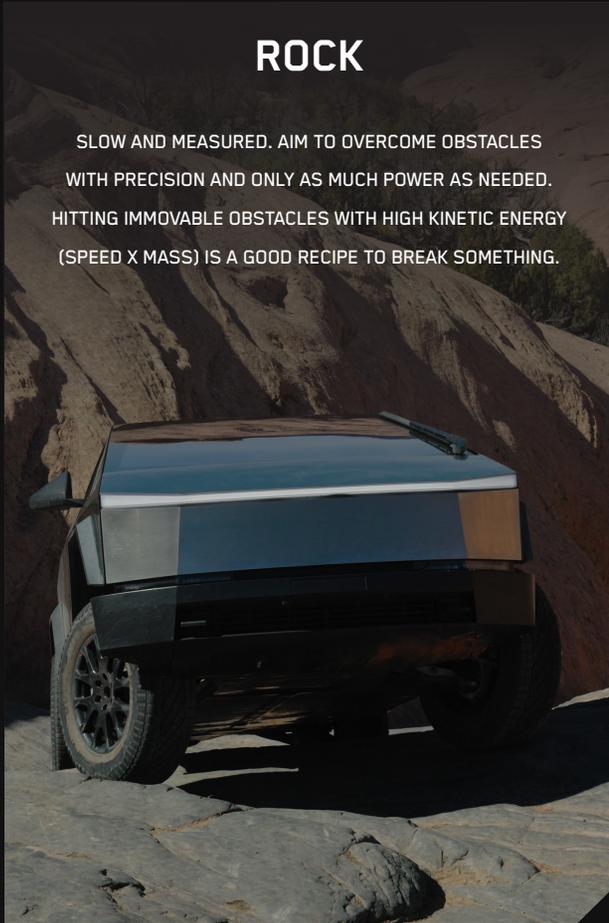
- HANDLE ALL SURFACES INCLUDING SAND, GRAVEL, AND ROCKS WITH MAXIMIZED TRACTION AT LOW SPEEDS.
- RECOMMENDED RIDE HEIGHT IS 'HIGH' FOR ALL-PURPOSE, GRAVEL, AND SAND MODES. ROCK MODE WILL DEFAULT TO 'VERY HIGH'.
- YOU CAN MANUALLY ADJUST THE SET RIDE HEIGHT AT ANY TIME.
- BE AWARE, SPEED IS LIMITED TO 25MPH IN 'VERY HIGH', AND 10MPH IN 'EXTRACT'. TORQUE IS ALSO LIMITED IN 'EXTRACT'.
- SEE APPENDIX FOR GROUND CLEARANCE AND APPROACH/BREAK-OVER/DEPARTURE ANGLES IN EACH MODE.



HOW TO DRIVE ON CERTAIN SURFACES

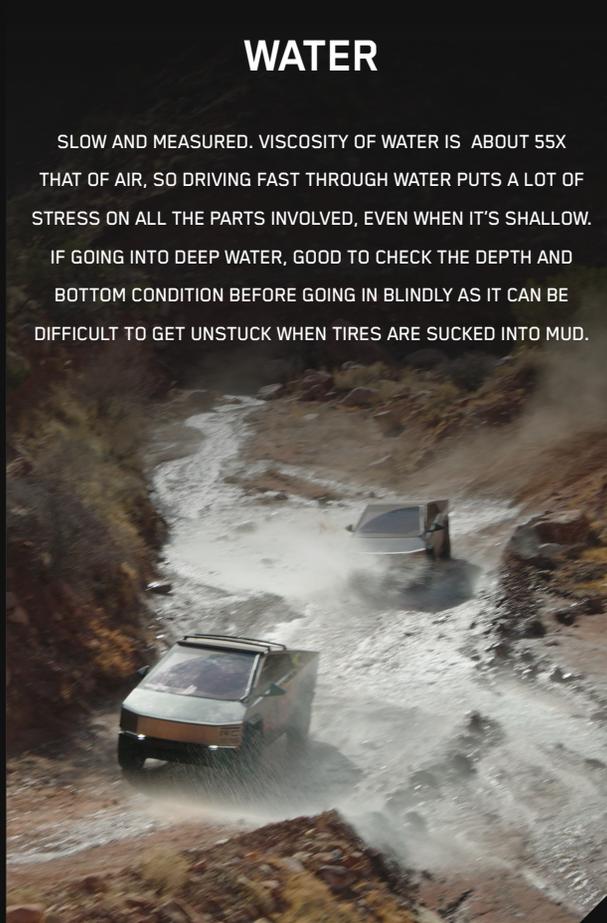
ROCK

SLOW AND MEASURED. AIM TO OVERCOME OBSTACLES WITH PRECISION AND ONLY AS MUCH POWER AS NEEDED. HITTING IMMOVABLE OBSTACLES WITH HIGH KINETIC ENERGY (SPEED X MASS) IS A GOOD RECIPE TO BREAK SOMETHING.



WATER

SLOW AND MEASURED. VISCOSITY OF WATER IS ABOUT 55X THAT OF AIR, SO DRIVING FAST THROUGH WATER PUTS A LOT OF STRESS ON ALL THE PARTS INVOLVED, EVEN WHEN IT'S SHALLOW. IF GOING INTO DEEP WATER, GOOD TO CHECK THE DEPTH AND BOTTOM CONDITION BEFORE GOING IN BLINDLY AS IT CAN BE DIFFICULT TO GET UNSTUCK WHEN TIRES ARE SUCKED INTO MUD.



SAND / SNOW

MAINTAIN MOMENTUM (DON'T STOP IN DEEP SAND/SNOW, AND IF YOU DO, START SLOWLY) AND AVOID HIGH SIDE SLIP. IT'S EASY FOR A DEFORMABLE SURFACE TO BUILD UP NEXT TO THE TIRES WHILE SLIDING SIDEWAYS AND PUT THE VEHICLE AT ROLLOVER RISK.





WADE MODE

ENTER AND DRIVE THROUGH SHALLOW BODIES OF WATER, SUCH AS DEFINED CROSSING POINTS OF RIVERS OR CREEKS, USING WADE MODE.

BE SURE TO CHECK THE WATER DEPTH AND CURRENT SPEED BEFORE ENTERING. CROSS THROUGH WATER SLOWLY AS DRIVING QUICKLY THROUGH WATER CAN IMPART IMMENSE FORCE AND CAUSE DAMAGE TO YOUR VEHICLE.

REFER TO THE [OWNER'S MANUAL](#) FOR MORE INFORMATION ON WADE MODE.

WADE MODE DEFAULTS RIDE HEIGHT TO 'VERY HIGH', SWITCHES HVAC TO RECIRCULATE AND PRESSURIZES THE BATTERY PACK TO PROTECT FROM WATER AND DEBRIS.

WADE MODE IS INTENDED FOR WATER UP TO 32 INCHES (815 MM) DEEP, MEASURING FROM THE BOTTOM OF THE TIRES IN 'VERY HIGH' RIDE HEIGHT. IT IS NOT REQUIRED FOR DEPTHS LESS THAN THE HEIGHT OF THE BATTERY PACK.

WADE MODE DURATION IS LIMITED TO 30 MINUTES AND MAY TAKE UP TO 10 MINS TO COMPLETELY FILL THE AIR SYSTEM AND PRESSURIZE THE BATTERY PACK ONCE ENABLED.

BAJA MODE

DRIVE HIGH-SPEED ON DIRT ROADS OR IN THE DESERT WITH OPTIMIZED SUSPENSION AND TRACTION CONTROL.

TERRAIN IS SET TO 'SMOOTH' BY DEFAULT WHICH WILL HAVE THE LOWEST CENTER OF GRAVITY. CHANGE THE SLIDER TO 'RUGGED' TO OPTIMIZE SUSPENSION TRAVEL. USE CLEARANCE TO TEMPORARILY PASS OVER LARGER OBSTACLES. REBOUND AND COMPRESSION DAMPING ARE ADJUSTED TO PROVIDE MORE STABILITY AS WELL AS PROTECTION AGAINST LARGE IMPACTS. IN ADDITION, THE ELECTRONIC STABILITY CONTROL SYSTEM ALLOWS MORE TIRE SLIP FOR DYNAMIC DRIVING ON LOW-TRACTION SURFACES.

YOU CAN ADJUST THE HANDLING BALANCE FROM 'UNDERSTEER' TO 'NEUTRAL' TO OVERSTEER WITH THE SLIDER.

ADDITIONALLY YOU CAN ADJUST THE LEVEL OF STABILITY CONTROL.

- **STANDARD** – WILL ALLOW MUCH MORE VEHICLE YAW AND WHEEL SLIP THAN ON-ROAD AND OVERLAND MODES. HOWEVER STABILITY CONTROL IS STILL AUGMENTING YOUR DRIVING.
- **REDUCED** – FURTHER INCREASED VEHICLE YAW ALLOWANCE, STABILITY CONTROL IS GREATLY REDUCED.
- **MIN** – STABILITY CONTROL MINIMIZED.

IF YOUR VEHICLE DETECTS IT IS AIRBORNE, THE DAMPERS WILL ADJUST TO ATTEMPT TO PROTECT THE VEHICLE WHILE LANDING.



CLIMBING OVER OR UP



IF YOU ARE APPROACHING A LARGE OBSTACLE OR CHANGE IN INCLINE, SET THE RIDE HEIGHT TO 'VERY HIGH' TO INCREASE APPROACH, BREAKOVER, AND DEPARTURE ANGLES (SEE APPENDIX). THESE ANGLES DETERMINE HOW CAPABLE CYBERTRUCK IS CLIMBING OVER AN OBSTACLE OR UP AN INCLINE. 'EXTRACT' MODE CAN BE USED FOR EXTREME CASES BUT WILL BE A VERY STIFF RIDE SINCE THE SUSPENSION TRAVEL IS MAXED OUT. SWITCHING INTO 'EXTRACT' MULTIPLE TIMES CAN CAUSE THE AIR COMPRESSOR TO OVERHEAT. YOU CAN MONITOR THIS ON THE VITALS SCREEN AND ALLOW TIME TO COOL IF IT HAPPENS.

LOCKING DIFFERENTIALS: IF ONE WHEEL BECOMES AIRBORNE WHILE CLIMBING UP OR OVER AN OBSTACLE, THE LOCKING DIFFERENTIALS WILL APPLY TORQUE TO THE WHEEL WITH GREATER TRACTION TO KEEP THE VEHICLE MOVING.

DUAL MOTOR VARIANTS: ARE EQUIPPED WITH MECHANICAL FRONT AND REAR LOCKING DIFFERENTIALS.

TRI-MOTOR (CYBERBEAST) VARIANTS: ARE EQUIPPED WITH A MECHANICAL FRONT LOCKING DIFFERENTIAL, AND A VIRTUAL REAR LOCKING DIFFERENTIAL TO PROVIDE SUFFICIENT TORQUE IN EACH REAR WHEEL. THE REAR LOCKING DIFFERENTIAL AUTOMATICALLY ENGAGES IN CERTAIN DRIVE MODES AND SPEEDS, AND CANNOT BE MANUALLY ENGAGED OR DISENGAGED.

WARNING: LARGE STEERING ANGLE OR HIGH ACCELERATION WITH LOCKERS ENGAGED WILL CAUSE THE VEHICLE TO JERK AND MAY DAMAGE YOUR DRIVETRAIN. THIS IS ESPECIALLY TRUE ON HIGH FRICTION SURFACES LIKE ASPHALT.

TIPS AND TRICKS: WHILE ENGAGING (ICON BLINKING) YOU CAN MOVE SLOWLY FORWARD OR REVERSE WHILE TURNING THE STEERING SLIGHTLY, OR WHILE STATIONARY TURN FULL LOCK TO LOCK. THIS ACTION CREATES RELATIVE ROTATION BETWEEN THE TWO SHAFTS TO ALLOW THE LOCKER TO ENGAGE.

WHILE DISENGAGING (ICON BLINKING) DRIVING SLOWLY IN A STRAIGHT LINE WILL TYPICALLY BE ALL THAT IS NEEDED. IF NOT, CONSIDER THE DIRECTION YOU WERE TURNING WHILE LOCKED AND TRY TURNING IN THE OPPOSITE DIRECTION TO RELIEVE THE TORSIONAL STRESS. WHEN YOU CAN TURN WITHOUT THE WHEELS SCRUBBING, THE LOCKER HAS DISENGAGED.

TRAIL ASSIST

THINK OF THIS AS A LOW-SPEED CRUISE CONTROL.

INTERNAL COMBUSTION ENGINES CAN MAINTAIN A STEADY SPEED BY CONSTANTLY VARYING TORQUE, AND PUTTING THE VEHICLE GEARING INTO LOW RANGE GIVES YOU THE ABILITY TO CRAWL FORWARD VERY SLOWLY WITHOUT NEEDING TO USE THE ACCELERATOR.

THIS CAN BE VERY HELPFUL WHEN NAVIGATING DIFFICULT TERRAIN WHERE YOUR FOCUS IS BEST SPENT ON STEERING. YOU CAN SET TRAIL ASSIST FROM 1.0 MPH UP TO 25 MPH BY INCREMENTS OF 0.5 MPH.

TO USE THIS FEATURE, CLICK THE RIGHT STEERING WHEEL SCROLL WHEEL TO ENABLE, THEN SCROLL UP OR DOWN TO ADJUST SET SPEED.

IMPORTANT TO NOTE THAT YOU CAN DRIVE COLLABORATIVELY WITH TRAIL ASSIST BY ADDING EITHER BRAKE PEDAL OR ACCEL PEDAL.

TO TURN OFF TRAIL ASSIST, EITHER CLICK THE SCROLL WHEEL A SECOND TIME OR HOLD THE BRAKE, BRINGING THE VEHICLE TO A STOP AND THEN PRESS FIRMLY INTO THE BRAKE.





IF YOU GET STUCK

BUILDING BLOCKS TO INCREASING TRACTION IN OFF-ROAD MODE:

1. PUT CYBERTRUCK INTO **OVERLAND MODE**.
2. **ADJUST SUSPENSION HEIGHT**. RAISE UNTIL VEHICLE ISN'T OBSTRUCTED ON OBSTACLES. AVOID LOWERING TO PREVENT UNDERBODY DAMAGE.
3. **ADJUST TERRAIN MODE**. BASED ON SURFACE CONDITIONS, DETERMINE THE BALANCE REQUIRED BETWEEN TRACTION AND MOMENTUM. FOR HIGH TRACTION TERRAINS, SELECT THE ROCK SURFACE MODE. FOR LOOSER SURFACES, MOMENTUM MAY BE REQUIRED. FOR MAXIMUM MOMENTUM, USE SAND.
4. **ENGAGE FRONT AND/OR REAR LOCKING DIFFERENTIALS**.
5. FOR SOFT SURFACES OR STEEP INCLINES, **ENGAGE TRAIL ASSIST** FOR A STEADY PROGRESSION THROUGH COMPLEX SURFACES.

ADDITIONAL COUNTER MEASURES:

1. **DECREASE TIRE PRESSURES**. DECREASING TIRE PRESSURES TO 36 PSI WILL INCREASE TIRE CONTACT WITH THE SURFACE AND CAN AID IN TRACTION TO HELP GET YOU UNSTUCK.
2. **USE TRACTION AIDS**. TRACTION BOARDS CAN IMPROVE THE TRACTION OF INDIVIDUAL WHEELS TO INCREASE CHANCES OF RECOVERY.
3. **STACK ROCKS**.
4. **GET AN ASSIST** FROM ANOTHER VEHICLE USING RECOVERY EQUIPMENT.

ADDITIONAL TIPS:

- **BEING SMOOTH AND AVOIDING WHEEL SPIN** IN GENERAL IS THE BEST WAY TO KEEP TRACTION IN TECHNICAL DRIVING SITUATIONS—TRAIL ASSIST IS HELPFUL WITH THIS. CARRYING MOMENTUM TO OVERCOME AN OBSTACLE SHOULD BE A LAST RESORT AS IT COMMONLY RESULTS IN HARDWARE DAMAGE.
- IN SAND AND SNOW, HOWEVER, **MOMENTUM IS KEY** TO AVOID SINKING AND BEING STUCK, SO AVOID STOPPING IN DEEP SAND AND SNOW IF POSSIBLE. IF YOU DO BECOME STUCK IN DEEP SAND OR SNOW, TRY USING TRAIL ASSIST SET TO A VERY LOW SPEED TO CRAWL OUT.



AUXILIARY POWER

CYBERTRUCK IS EQUIPPED WITH TWO 48V AUXILIARY POWER FEEDS. THESE FEEDS CAN BE INDEPENDENTLY ENABLED FROM THE USER INTERFACE AND WILL PROVIDE BETWEEN 36-58V OF POWER TO ACCESSORIES, DEPENDING ON THE LV STATE OF CHARGE. POWER FEEDS ARE LOCATED ON THE ROOF AND IN THE POWERED FRUNK.

- THE FEED IN THE FRUNK PROVIDES 400W OF POWER.
- THE FEED IN THE ROOF PROVIDES 400W OF POWER.

POWER CONSUMPTION MAY INCREASE WHILE USING THE VEHICLE TO POWER OTHER ELECTRONICS AND OBJECTS.

REFER TO THE [OWNER'S MANUAL](#) FOR MORE INFORMATION ON ACCESSING THE CYBERTRUCK POWER FEEDS.

OFF-ROAD LIGHT BAR

YOU CAN PURCHASE AN OFF-ROAD LIGHT BAR FROM THE TESLA SHOP. THIS LIGHTBAR IS DESIGNED TO WORK IN HARMONY WITH EXISTING HIGH BEAMS AND COMMUNICATES WITH THE VEHICLE DIRECTLY ENABLING YOU TO CONTROL FORWARD FACING OR DITCH LIGHTING ON SEPARATELY AS WELL AS CONTROLLING THE OVERALL BRIGHTNESS OF THE LIGHT BAR.

THE OFF-ROAD LIGHT BAR IS ONLY INTENDED FOR OFF-ROAD USE AND SHOULD NEVER BE USED ON PUBLIC ROADS. ALWAYS BE AWARE OF ONCOMING VEHICLES, AS THE LIGHT CAN REDUCE VISIBILITY FOR OTHER DRIVERS.

VEHICLE MODIFICATIONS

TIRES

TIRES: ADDING LARGER TIRES WILL COMPROMISE TURNING RADIUS, AS WELL AS INCREASING CHASSIS LOADS AND POTENTIALLY RUBBING ON THE BODY. 18" WHEELS (DOWN FROM THE STOCK 20") CAN BE USED TO ADD MORE CUSHION, PROVIDED THE TIRE OVERALL DIMENSIONS ARE EQUAL OR LESS THAN THE OEM TIRE.

AFTERMARKET TIRES: TIRES NOT DESIGNED FOR ELECTRIC VEHICLES TYPICALLY HAVE LOWER EFFICIENCY AND HIGHER ROAD NOISE.

- **ALL-TERRAIN** IS THE LEAST AGGRESSIVE OFF-ROAD TIRE, GOOD FOR ALL PURPOSE DRIVING, AND WILL IMPACT ROAD NOISE AND EFFICIENCY THE LEAST.
- **3 PEAK MUD AND SNOW RATED ALL TERRAIN** IS A GOOD OPTION FOR COLD WEATHER DRIVING WHERE YOU EXPECT TO ENCOUNTER SNOW AND ICE.
- **MUD TERRAIN** IS THE MOST AGGRESSIVE TIRE, USEFUL FOR DRIVING IN DIRT AND MUD BUT WILL COME WITH THE LARGEST PENALTY IN RANGE AND ROAD NOISE.





ACCESSORIES

VISIT [SHOP.TESLA.COM](https://shop.tesla.com) FOR CYBERTRUCK ACCESSORIES LIKE AIR COMPRESSOR, SNOW CHAINS, AND SPARE TIRE.

EXTERIOR DIMENSIONS



APPENDIX

GROUND CLEARANCE AND APPROACH/BREAK-OVER/DEPARTURE ANGLES

	EXTERIOR DIMENSIONS	IN	MM
LENGTHS	OVERALL LENGTH	223.74	5682.9
	WHEELBASE	143.11	3635
	OVERHANG - FRONT	34.58	878.3
	OVERHANG - REAR	46.05	1169.6
WIDTHS	OVERALL WIDTH (INCLUDING MIRRORS)	95.01	2413.3
	OVERALL WIDTH (INCLUDING FOLDED MIRRORS)	86.64	2200.7
	OVERALL WIDTH (EXCLUDING MIRRORS)	79.99	2031.8
	TRACK WIDTH - FRONT	69.76	1772
	TRACK WIDTH - REAR	69.76	1772
HEIGHTS	OVERALL HEIGHT - ENTRY/EXIT AIR SETTING	68.54	1740.8
	OVERALL HEIGHT - LOW AIR SETTING	69.13	1755.8
	OVERALL HEIGHT - MEDIUM AIR SETTING	70.70	1795.8
	OVERALL HEIGHT - HIGH AIR SETTING	73.06	1855.8
	OVERALL HEIGHT - VERY HIGH AIR SETTING	74.64	1895.8
	OVERALL HEIGHT - EXTRACT (HIGHEST) AIR SETTING	76.61	1945.8
	GROUND CLEARANCE - ENTRY/EXIT AIR SETTING	7.93	201.3
	GROUND CLEARANCE - LOW AIR SETTING	8.52	216.3
	GROUND CLEARANCE - MEDIUM AIR SETTING	10.09	256.3
	GROUND CLEARANCE - HIGH AIR SETTING	12.45	316.3
	GROUND CLEARANCE - VERY HIGH AIR SETTING	14.03	356.3
	GROUND CLEARANCE - EXTRACT (HIGHEST) AIR SETTING	16.00	406.3

	APPROACH / BREAKOVER / DEPARTURE	ANGLE
APPROACH ANGLES	APPROACH ANGLE - ENTRY/EXIT AIR SETTING	25.0°
	APPROACH ANGLE - LOW AIR SETTING	26.3°
	APPROACH ANGLE - MEDIUM AIR SETTING	29.5°
	APPROACH ANGLE - HIGH AIR SETTING	33.9°
	APPROACH ANGLE - VERY HIGH AIR SETTING	36.6°
	APPROACH ANGLE - EXTRACT (HIGHEST) AIR SETTING	39.9°
BREAKOVER ANGLES	BREAKOVER ANGLE - ENTRY/EXIT AIR SETTING	13.0°
	BREAKOVER ANGLE - LOW AIR SETTING	13.9°
	BREAKOVER ANGLE - MEDIUM AIR SETTING	16.5°
	BREAKOVER ANGLE - HIGH AIR SETTING	20.3°
	BREAKOVER ANGLE - VERY HIGH AIR SETTING	22.9°
DEPARTURE ANGLES	BREAKOVER ANGLE - EXTRACT AIR SETTING	26.0°
	DEPARTURE ANGLE - ENTRY/EXIT AIR SETTING	14.4°
	DEPARTURE ANGLE - LOW AIR SETTING	16.3°
	DEPARTURE ANGLE - MEDIUM AIR SETTING	18.8°
	DEPARTURE ANGLE - HIGH AIR SETTING	22.3°
	DEPARTURE ANGLE - VERY HIGH AIR SETTING	24.7°
	DEPARTURE ANGLE - EXTRACT AIR SETTING	27.6°