TABLE OF CONTENTS

TOOL OVERVIEW

USING THE CENTER STAND - DISTANCE (X)

- FASCIA JIG
- HUB JIG

USING THE CENTER STAND - DISTANCE (Y)

- MEASURE BAR
- MEASURING TAPE

USING THE TARGET STAND - DISTANCE (Z)

- PLACING THE STAND
- SETTING THE TARGET HEIGHT (Z)

FLOORSPACE REQUIREMENTS

TARGET PLACEMENT REFERENCE

R1 COMMON:

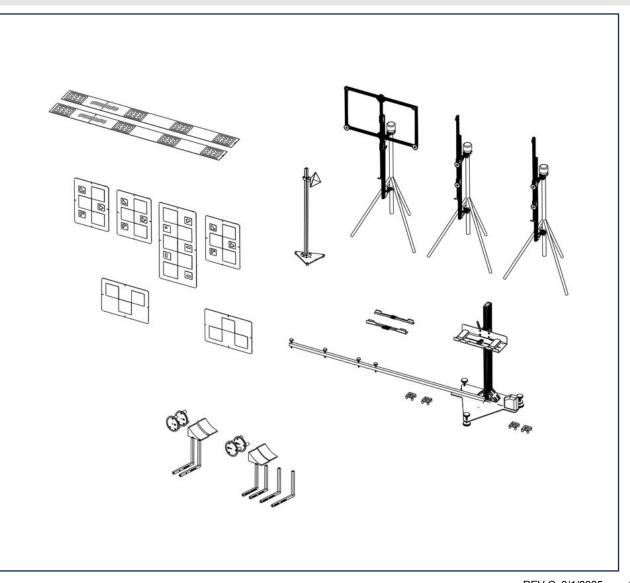
- DRIVER ASSISTANCE
- SURROUND VIEW
- FRONT RADAR

R1 2025 (PEREGRINE):

- LONG RANGE
- WIDE ANGLE
- FORWARD FACING MIRROR
- LANE CHANGE

RCV:

- DRIVER ASSISTANCE
- SURROUND VIEW
- FRONT RADAR



BEFORE YOU BEGIN

- Vehicle should be updated to the most current customer software version.
- Choose a known smooth flat surface to perform calibration. This will ensure a smooth operation when positioning the tool. If performing outside, ensure that the vehicle and the ADAS calibration equipment are on the same plane to avoid uneven target to vehicle placement.
- Ensure that the vehicle has had an alignment performed (if suspension components have been replaced or suspension work have been performed). This will ensure that the wheel placement as well as camber toe are within spec when mounting the Hub jigs.
- Verify that the vehicle can be set to Design Ride Height (R1) for calibration and that no suspension faults are present.
- Inspect the vehicle for any damage close to the camera and/or radar mounting locations. If damage exists, be sure to have it repaired prior to performing the calibration. This will ensure that the calibration goes through smoothly and predictively.

TOOL OVERVIEW

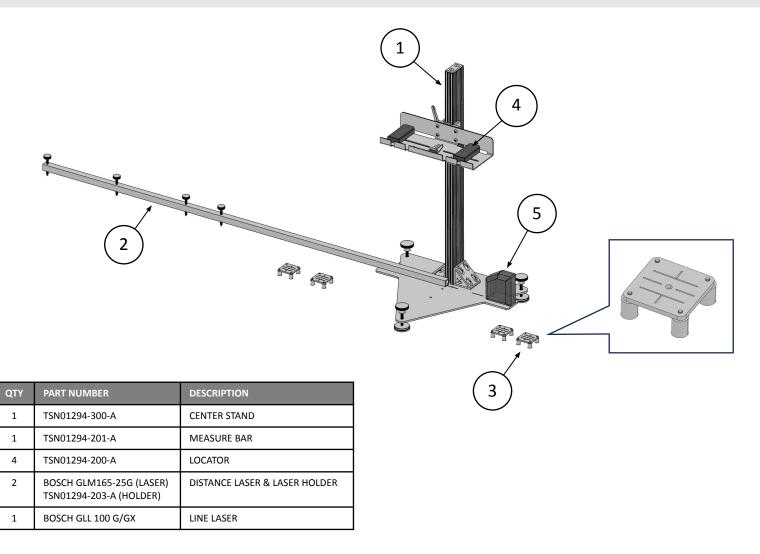
ITEM

1

2

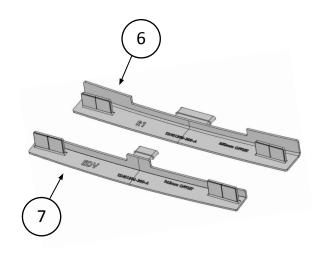
3

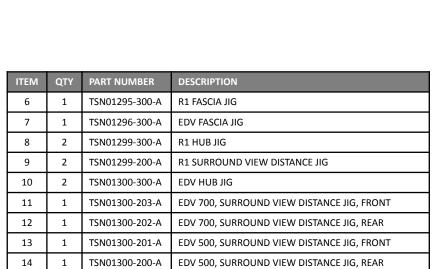
5

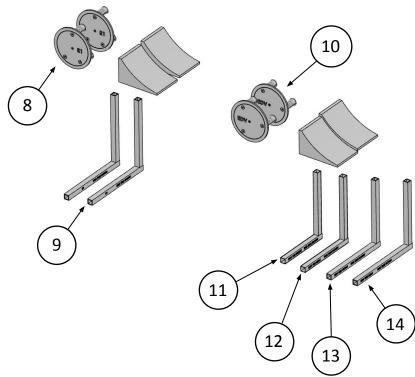


Rivian Internal

TOOL OVERVIEW



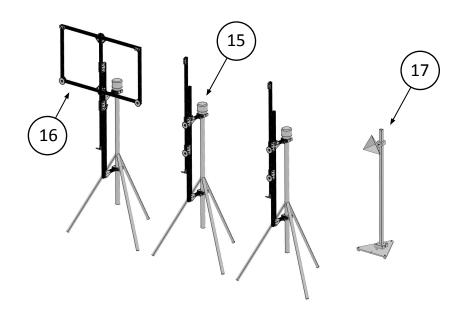




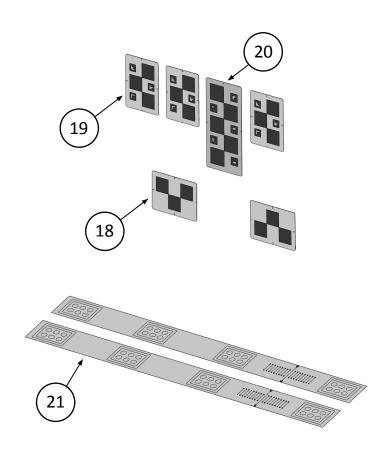
REV C, 8/1/2025 4

Rivian Internal

TOOL OVERVIEW



ITEM	QTY	PART NUMBER	DESCRIPTION
15	2	TSN01293-300-A	TARGET STAND
16	1	TSN01293-200-A	TARGET STAND, 2025 (PEREGRINE) LONG RANGE & SHORT RANGE
17	1	TSN01301-300-A	RADAR TARGET STAND
18	2	TSN01297-200-A	3 SQUARE TARGET
19	3	TSN01297-250-A	3 SQUARE TARGET, 2025 (PEREGRINE)
20	1	TSN01298-250-A	5 SQUARE TARGET, 2025 (PEREGRINE)
21	2	TSN00467-205-A	SURROUND VIEW MAT, FULL LENGTH



PLACING A TARGET – GENERAL WORKFLOW

Follow the steps in this document to place calibration targets.

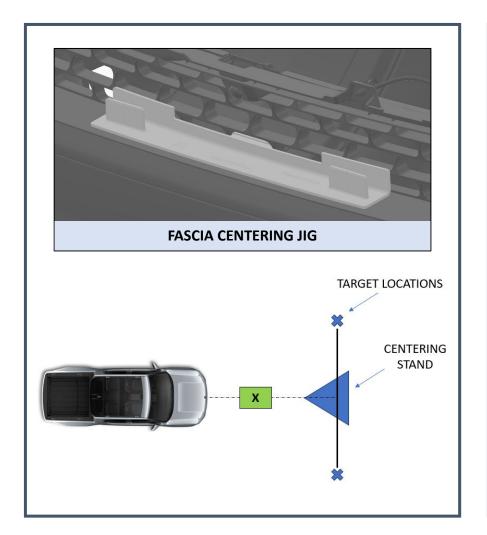
The tables at the end of this document provide all distances needed to place the current calibration targets.

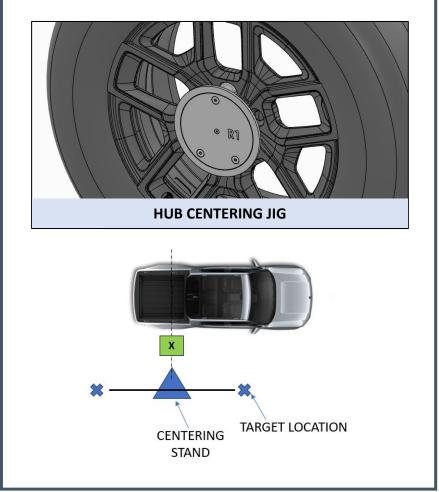
The general workflow to place a target is follows:

- 1. Using the CENTER STAND, measure a distance away from the vehicle. This is referred to as DISANCE (X).
- 2. From the CENTER STAND, measure a distance perpendicular to the stand to a set distance. This is referred to as DISANCE (Y).
- 3. Place a TARGET STAND to the marked location and set the target height. This is referred to as DISTANCE (Z)

USING THE CENTER STAND – DISTANCE (X)

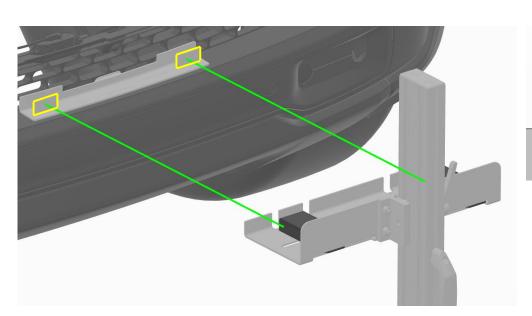
The centering stand measures a distance (X) from the vehicle, aimed at either of (2) types of jigs:

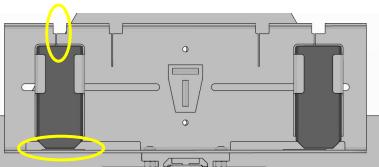




USING THE CENTER STAND – MEASURING DISTANCE TO THE FASCIA JIG

- Place the jig centered on the front fascia.
- On the centering stand, the lasers will be placed on the outermost positions.
- Align the notches on the laser holder with the lines on the bracket.
- Aim the lasers at the jig. The lasers should point inside the rectangular areas as shown.
- Adjust and aim the lasers as required, while ensuring that the back of the laser stays as flush as possible against the bracket.
- The distance measured on BOTH lasers should read within +/- 1.5mm.

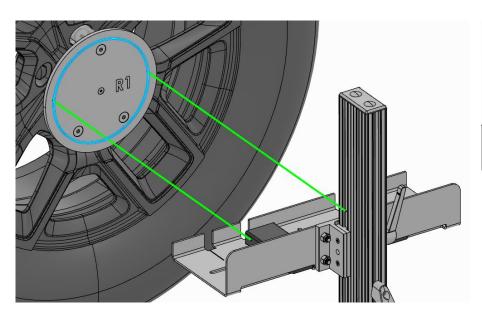


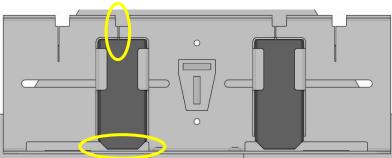




USING THE CENTER STAND - MEASURING DISTANCE TO THE HUB JIG

- Place the jig centered on the indicated (FRONT or REAR) wheel.
- On the centering stand, the lasers will be placed on the innermost positions.
- Align the notches on the laser holder with the lines on the bracket.
- Aim the lasers at the jig. The lasers should point inside the rectangular areas as shown.
- Adjust and aim the lasers as required, while ensuring that the back of the laser stays as flush as possible against the bracket.
- The distance measured on BOTH lasers should read within +/- 1.5mm.

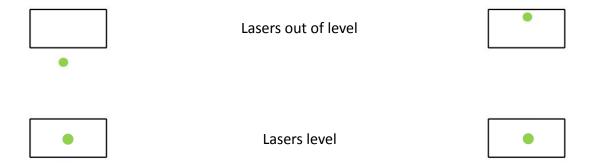






USING THE CENTER STAND – LASER SHIMMING

- If the laser dots are significantly out of level, use tape under one of the lasers to level them out.
 - · Place the center stand on a flat area
 - Level the stand
 - Shoot the lasers at a flat area such as a wall
 - · Place tape under the laser body until both lasers are pointing relatively level

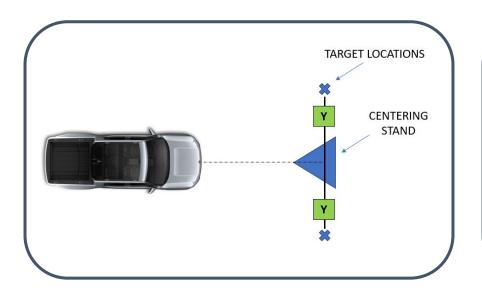


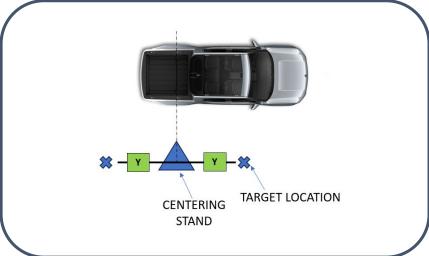


Tape under laser body

USING THE CENTER STAND - MEASURING DISTANCE (Y)

Measuring perpendicular from either side of the center stand, distance (Y) marks the target stand locations.



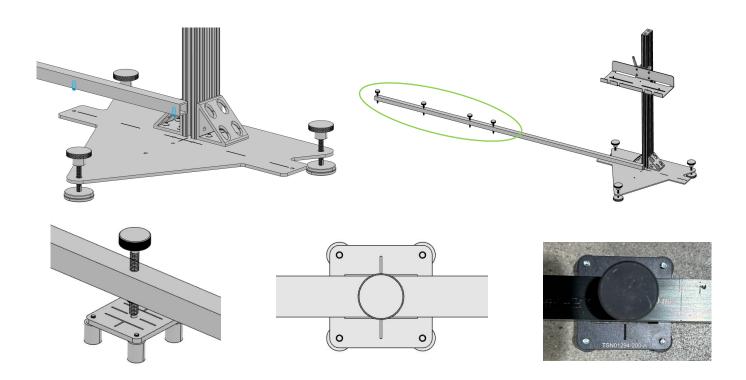


REV C, 8/1/2025 1

USING THE CENTER STAND - MEASURING DISTANCE (Y), MEASURE BAR

A pre-set measure bar will be used at designated distances.

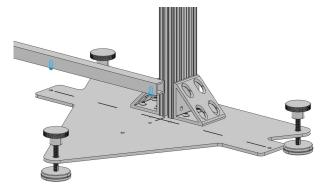
- Place the (2) locating pins on the measure bar into the center stand.
- Locate the thumbscrew at the required distance.
- Adjust the thumbscrew down and insert the end into a locator and ensure the measure bar sits flat on the center stand base.
- Clock the locator so that it is square to the measure bar.



USING THE CENTER STAND – MEASURING DISTANCE (Y), MEASURING TAPE

For distances other than those previously listed, use a measuring tape along the measure bar to the required distance.

- Place the (2) locating pins on the measure bar into the center stand.
- Adjust any one of the thumbscrews as required to ensure the measure bar sits flat on the center stand base.
- Measure from the end of the measure bar outward to the required distance.
- Place and align a locator. Clock the locator so that it is square to the measure bar.



Rivian Internal

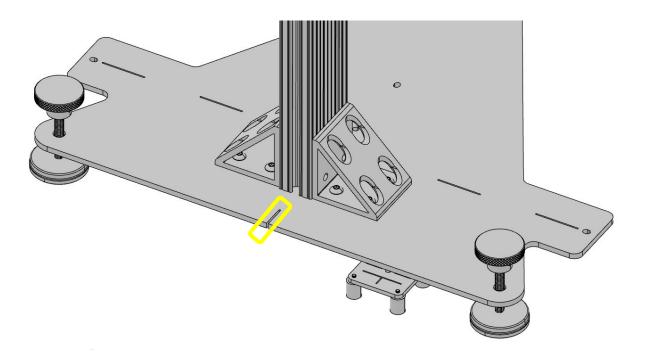




USING THE CENTER STAND – MEASURING DISTANCE (Y)

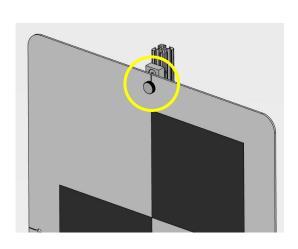
For some cases, the measurement will be taken from the rear of the center stand (refer to the target placement tables).

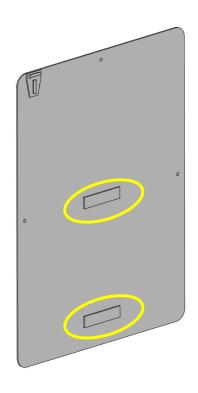
- Measure outward from the rear of center stand to the required distance.
- Place and align a locator. Square-up the locator to the rear of the center stand.



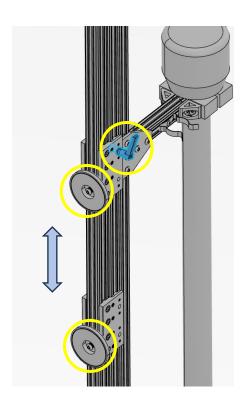
USING THE TARGET STAND

- Hang the correct target on the stand using the threaded stud.
- Slide the round magnets up and down as needed to mate with the target back.
- The height of the target is adjusted by loosening the lever knob.





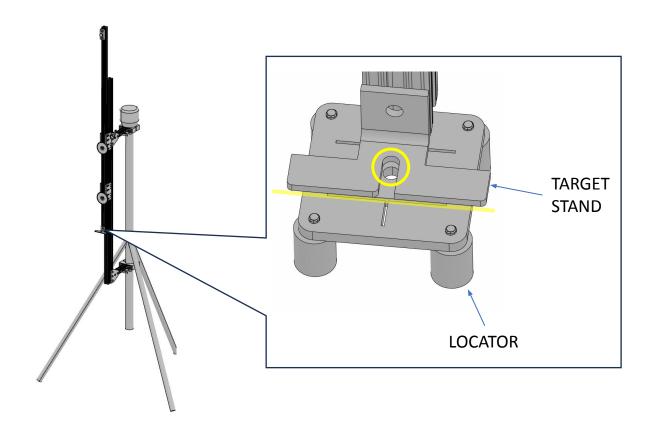
Rivian Internal



REV C, 8/1/2025 15

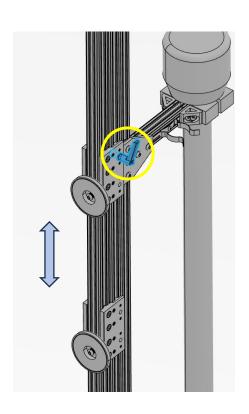
USING THE TARGET STAND – PLACING THE STAND

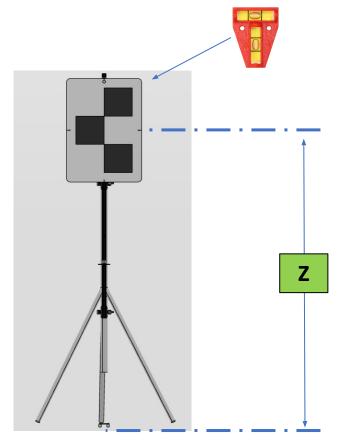
- Lower the target stand down and align the bracket with the locator placed in previous steps.
- The circular notch in the bracket aligns to the center hole in the locator.
- The edges of the bracket should be placed square to the markings on the locator.



USING THE TARGET STAND – SETTING THE TARGET HEIGHT (Z)

- Measure from the ground to the **CENTER** of the target.
- Raise/lower the target stand as need to reach the required height (Z).
- Visually level the target and use the reference bubble gauge as needed on the back.



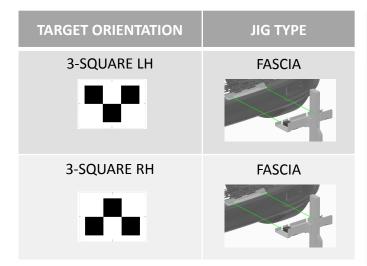


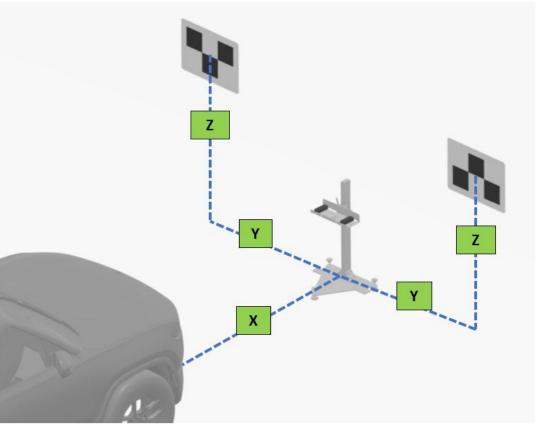
FLOORSPACE REQUIREMENTS SUMMARY

- The dimensions in the table below provide the minimum amount of space needed to perform calibrations using this system
- For additional detailed information, see the RTPS-ADAS MINIMUM FLOOR SPACE REQUIREMENTS document.

Vehicle	Calibration	Minimum Floor Space Required
R1 & RCV	Min. Ideal Dedicated Space (all calibrations)	45 x 24 FT (13.7 x 7.3 M)
	Front Windshield Cameras	42 x 16 FT (12.8 x 4.9 M)
	Forward Facing Mirror (both sides)	37 x 21.5 FT (11.3 x 6.6 M)
	Forward Facing Mirror (one side at a time)	37 x 15.5 FT (11.3 x 4.7 M)
R1	Lane Change (both sides)	23 x 24 FT (7 x 7.3 M)
	Lane Change (one side at a time)	23 x 16.5 FT (7 x 5 M)
	Surround View	35 x 22.5 FT (10.7 x 6.9 M)
	Front Radar	30.5 x 9.5 FT (9.3 x 2.9 M)
	Front Windshield Camera	43.5 x 16 FT (13.3 x 4.9 M)
RCV	Surround View	45 x 22.5 FT (13.7 x 6.9 M)
	Front Radar	35 x 10.5 FT (10.7 x 3.2 M)

R1 – DRIVER ASSISTANCE

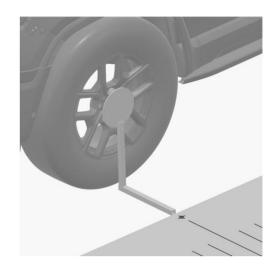




R1 – SURROUND VIEW

SETUP ONE SIDE WITH THE JIGS, THEN PLACE JIGS ON THE OTHER SIDE TO SET THE OTHER MAT

TARGET ORIENTATION	JIG TYPE	JIG SETUP
SURROUND VIEW MATS :::: :::: ::::::::::::::::::::::::::	R1 DISTANCE JIG & R1 HUB JIG	NOTE THE MARKING FOR "THIS SIDE DOWN" THIS SIDE IS PLACE ALONG THE FLOOR

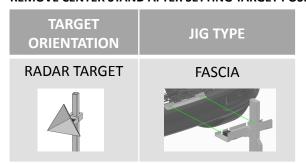


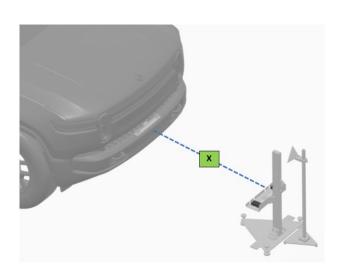


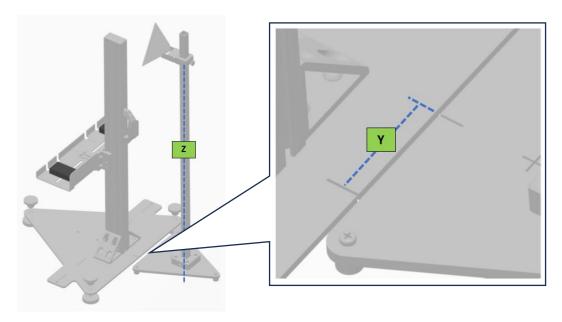
FOR R1, FOLD OVER THE REAR SECTION OF THE MATS
TO COVER THE EXTRA TARGET SECTION

R1 – FRONT RADAR

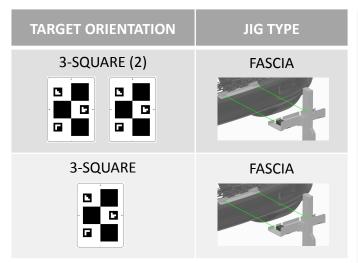
REMOVE CENTER STAND AFTER SETTING TARGET POSITION

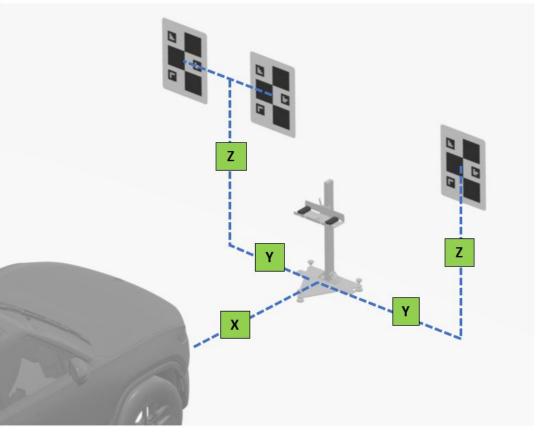




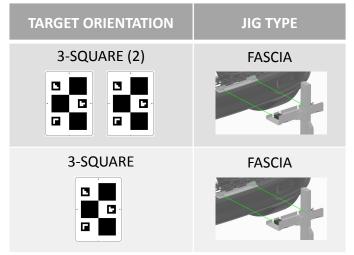


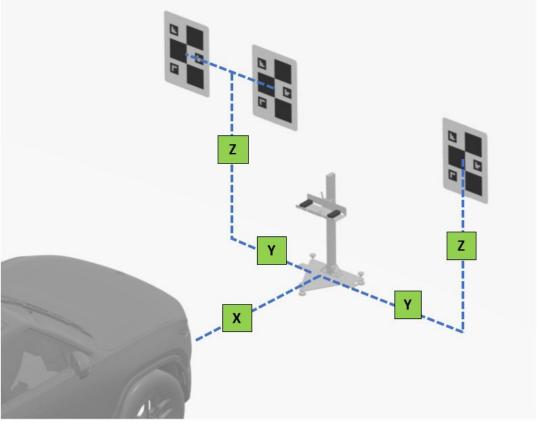
R1 – LONG RANGE, 2025 (PEREGRINE)





R1 – WIDE ANGLE, 2025 (PEREGRINE)





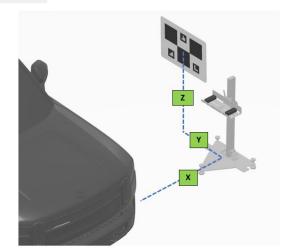
R1 – FORWARD FACING MIRROR, 2025 (PEREGRINE)

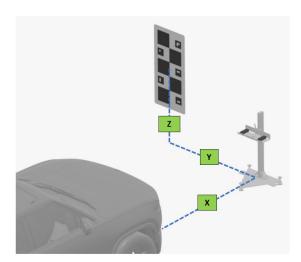
FOR RIDE ROUTINE: SEE 601010010/601010110 - Mirror, Side, (Remove and Replace)
PERFORM ON ONE SIDE OF THE VEHICLE AT A TIME

TARGET ORIENTATION	JIG TYPE
3-SQUARE	HUB, FRONT WHEEL
5-SQUARE	FASCIA

REFERENCE SERVICE MANUAL FOR X,Y,Z DIMENSIONS







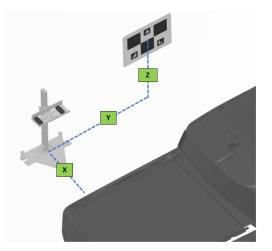
R1 COMMON: DRIVER ASSISTANCE SURROUND VIEW FRONT RADAR | R1 2025 (PEREGRINE): LONG RANGE SHORT RANGE FORWARD FACING MIRROR REARWARD FACING MIRROR | EDV: DRIVER ASSISTANCE SURROUND VIEW FRONT RADAR

R1 – LANE CHANGE, 2025 (PEREGRINE)

FOR RIDE ROUTINE: SEE 601010010/601010110 - Mirror, Side, (Remove and Replace) PERFORM ON ONE SIDE OF THE VEHICLE AT A TIME

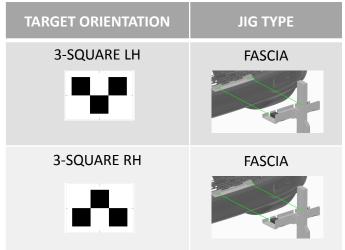
TARGET ORIENTATION	JIG TYPE
3-SQUARE	HUB, REAR WHEEL
5-SQUARE	HUB, REAR WHEEL

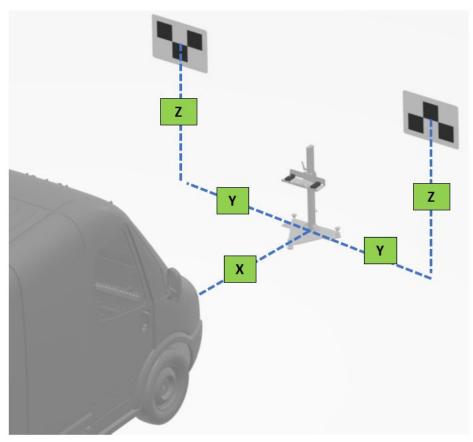






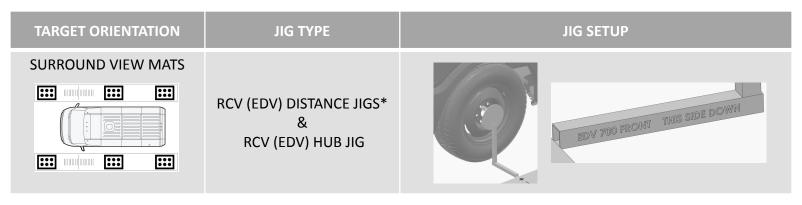
RCV – DRIVER ASSISTANCE



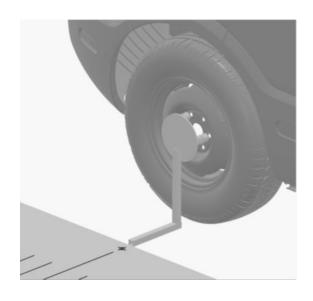


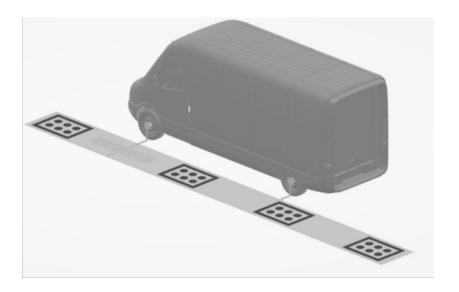
RCV - SURROUND VIEW

SETUP ONE SIDE WITH THE JIGS, THEN PLACE JIGS ON THE OTHER SIDE TO SET THE OTHER MAT



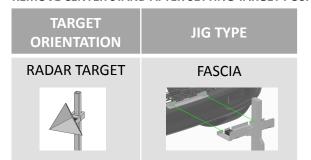
*THERE ARE INDIVIDUAL DISTANCE JIGS FOR EDV 700 FRONT/REAR & 500 FRONT/REAR. (4 TOTAL UNIQUE JIGS)

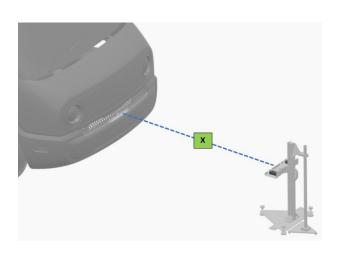


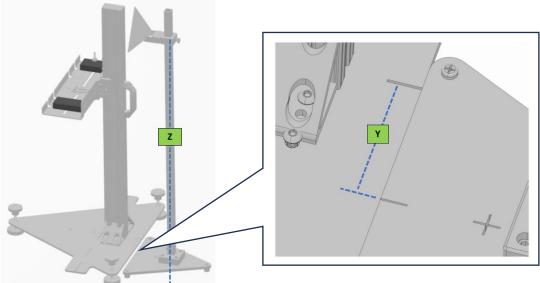


RCV - FRONT RADAR

REMOVE CENTER STAND AFTER SETTING TARGET POSITION







REV HISTORY

- REV B INITIAL RELEASE (SHOPIFY)
- REV C 8/1/25 REMOVES X,Y,Z COORDINATE CALLOUTS AND POINTS TO SERVICE MANUAL AS THE SOURCE OF TRUTH FOR THOSE DIMENSIONS.

REV C, 8/1/2025 2