

41287**Prepare and confirm global positioning system setup for a tractor carrying out a field activity**

Kaupae Level	3
Whiwhinga Credit	15
Whāinga Purpose	This skill standard is intended for people working in arable farming systems. They will be able to determine global positioning system (GPS) accuracy requirements, and prepare and confirm a tractor and GPS setup for a field activity, under limited supervision. This skill standard aligns to the New Zealand Certificate in Arable Farming (Level 3) [Ref: 5679]

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Determine the GPS correction service required for a field activity with guidance.	a. Identify available GPS correction services.
	b. Determine the appropriate correction service for the activity based on required accuracy and field conditions.
2. Prepare a tractor and GPS setup to conduct a field activity.	a. Establish an AB line in the GPS system for the field activity.
	b. Select and configure the implement in the GPS system for the field activity.
	c. Check for implement draft and adjust as required.
3. Confirm GPS setup during initial operation.	a. Conduct initial passes to confirm alignment and accuracy.
	b. Identify and correct GPS setup or alignment errors.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria*Assessment specifications:*

All activities must be carried out in accordance with workplace health and safety requirements, workplace procedures, and manufacturer's specifications.

Providers must give due consideration to embedding ngā kaupapa (principles) o Te Tiriti o Waitangi when designing delivery activities relevant to this standard. These principles are outlined in [Guidelines for Providers: Embedding Tirohanga Māori](#).

Providers must give due consideration to the needs and values of Pacific peoples and other cultural groups when designing delivery activities relevant to this standard, ensuring practices are inclusive and equitable.

Ākonga/learners should be assessed against this standard in a real-life context using naturally occurring evidence. A verifier's checklist with appropriate comments confirming competency is acceptable if accompanied by evidence that includes examples from the learner's performance.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

GPS correction services and accuracy

- GPS correction services e.g. Real Time Kinetic (RTK), Satellite-Based Augmentation System (SBAS), autonomous
- system accuracy in terms of precision and limitations
- selecting an appropriate correction service based on required accuracy, field conditions, and the activity being carried out
- effects of accuracy on field performance e.g. crop row overlap, pass-to-pass deviation, effect of satellite signal obstruction, time to achieve RTK fix.

GPS set up for field activity

- establishing AB line in the GPS system for the field activity
- selecting and configuring the implement in the GPS system for the field activity
- checking and adjusting for implement draft
- pre-operational checks to confirm AB line alignment and implement configuration accuracy e.g. width settings, map alignment, test validation within setup phase
- identifying potential setup issues and sources of information e.g. manufacturer's specifications, field maps, system guidance
- applying safe operating procedures during setup and pre-operational checks in accordance with workplace health and safety requirements and workplace procedures.

Initial operation and system confirmation

- initial passes to confirm alignment and accuracy
- identifying and correcting setup or alignment errors during initial operation e.g. GPS drift, implement offset, guidance misalignment
- monitoring system performance during initial operation e.g. pass accuracy, tracking consistency, implement behaviour.

Rauemi | Resources

- [Health and Safety at Work Act 2015.](#)
- Manufacturer's specifications.
- Farm-specific Standard Operating Procedures.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Food and Fibre Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Agriculture, Forestry and Fisheries > Agriculture > Agricultural Vehicles and Machinery
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0052

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	30 July 2026	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2031		

Please contact the Food and Fibre Industry Skills Board at info@foodandfibreisb.nz to suggest changes to the content of this skill standard.