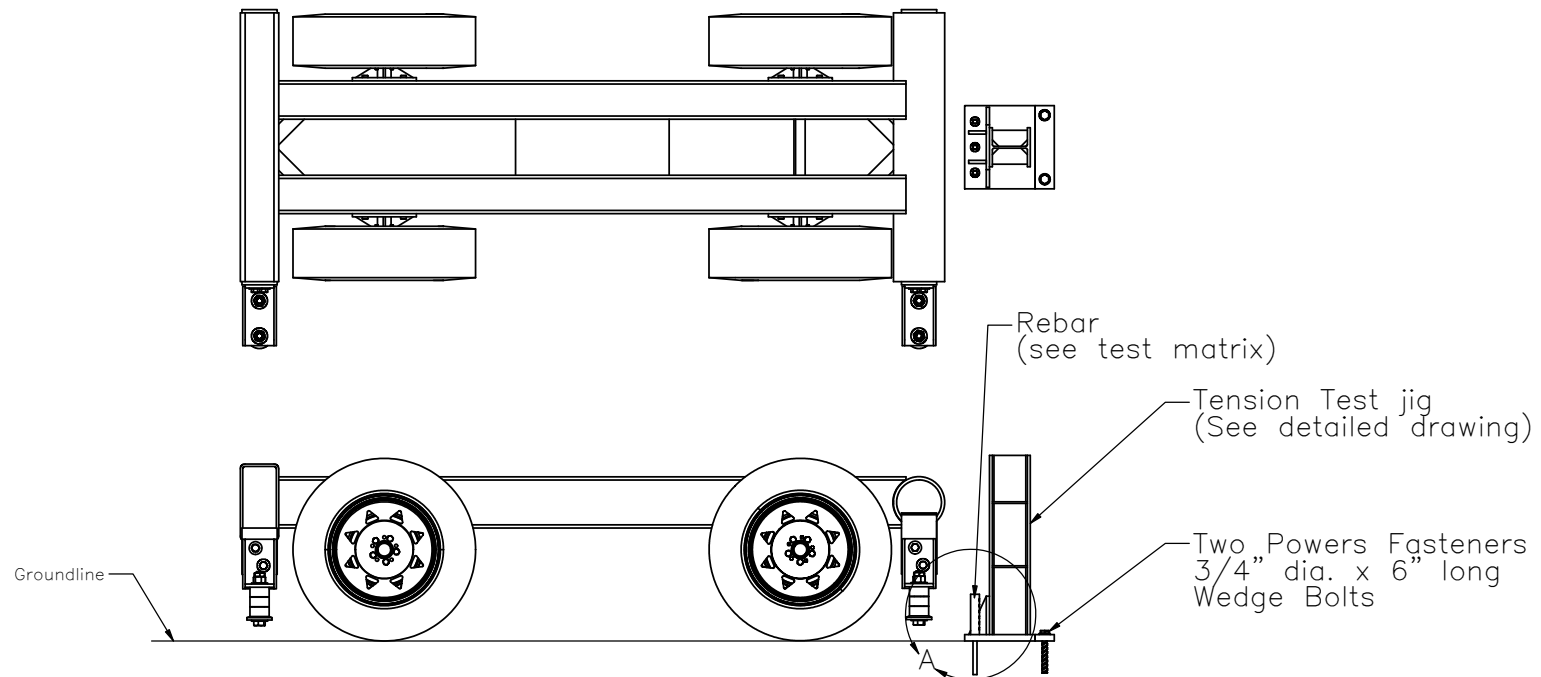


Epoxy Anchor Rebar Bogie Testing-Tensile Test Setup

1. Bogie No. 3 - Small Bogie with standard round impact head
2. Speed = 15 mph
3. One high-speed digital camera perpendicular
4. One high-speed digital camera perpendicular zoomed in on the tensile test jig and rebar.
5. JVC digital video
6. DTS and EDR-3
7. Note any installation issues or problems in fieldbook.
8. Note failure mode in fieldbook.
9. Each test must be at least 2' from any previous test anchor holes to prevent anchor spacing and edge spacing issues from affecting results.
10. Kick plate anchors must be replaced each test.
11. Epoxy and epoxy-coated rebar will be donated.
12. Before installation of anchors, measure the bar deformation rib height as well as the epoxy-coating thickness.
13. Epoxy used for first round of testing will be Hilti HIT-RE 500.



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Epoxy Anchor Testing
Tension Test Setup

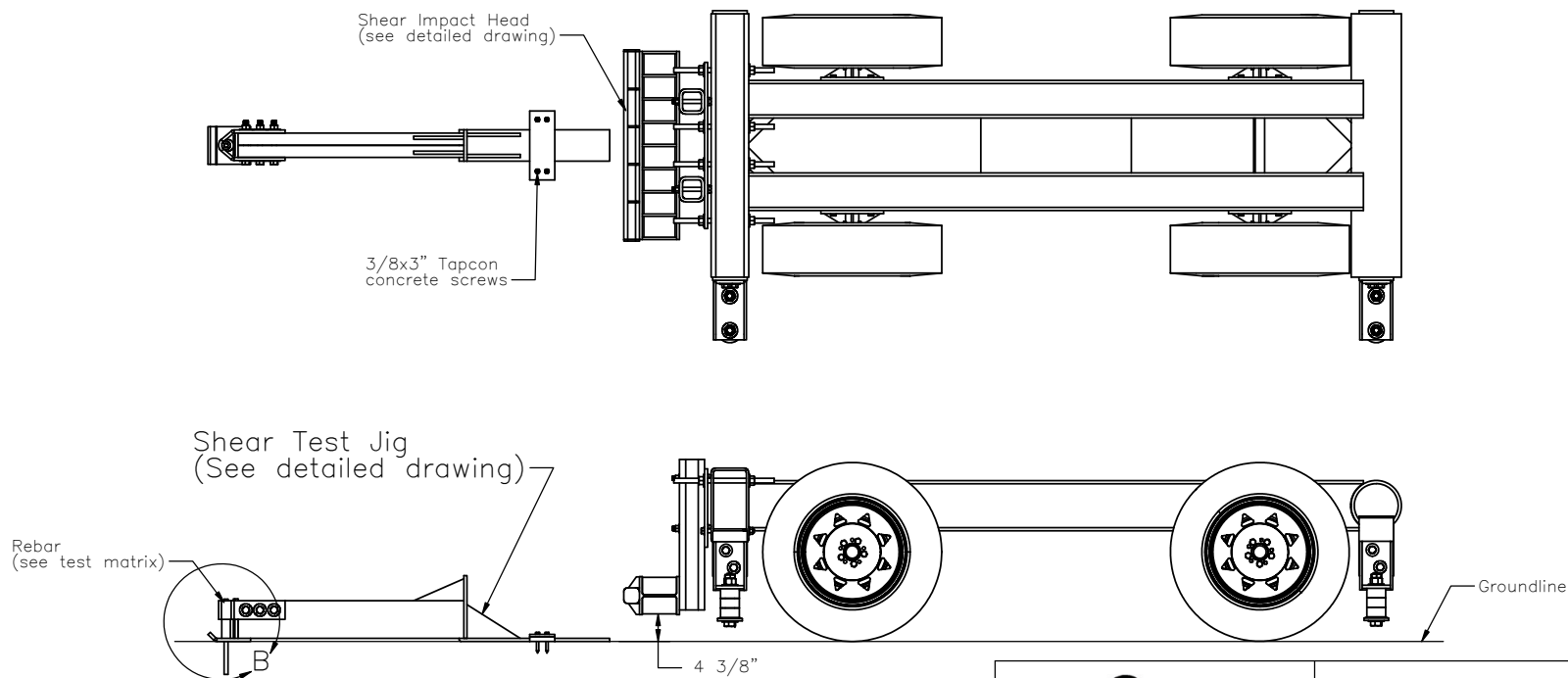
DWG. NAME.
EpoxyAnchor test setup matrix_1-8_R7

SCALE: None
UNITS: Inches

SHEET:
1 of 4
DATE:
05/09/2011
DRAWN BY:
MDM/RJT/
JGP
REV. BY:
KAL/BD

Epoxy Anchor Rebar Bogie Testing—Shear Test Setup

1. Bogie No. 3 – Small Bogie with Shear Impact Head
2. Speed = 10 mph
3. One high-speed digital camera perpendicular
4. One high-speed digital camera perpendicular zoomed in on the shear test jig and rebar.
5. JVC digital video
6. DTS and EDR-3
7. Note any installation issues or problems in fieldbook.
8. Note failure mode in fieldbook.
9. Each test must be at least 2' from any previous test anchor holes to prevent anchor spacing and edge spacing issues from affecting results.
10. Epoxy and epoxy-coated rebar will be donated.
11. Before installation of anchors, measure the bar deformation rib height as well as the epoxy coating thickness.
12. Tapcon concrete screws need to be replaced after each test.
13. Epoxy used for first round of testing will be Hilti HIT-RE 500.

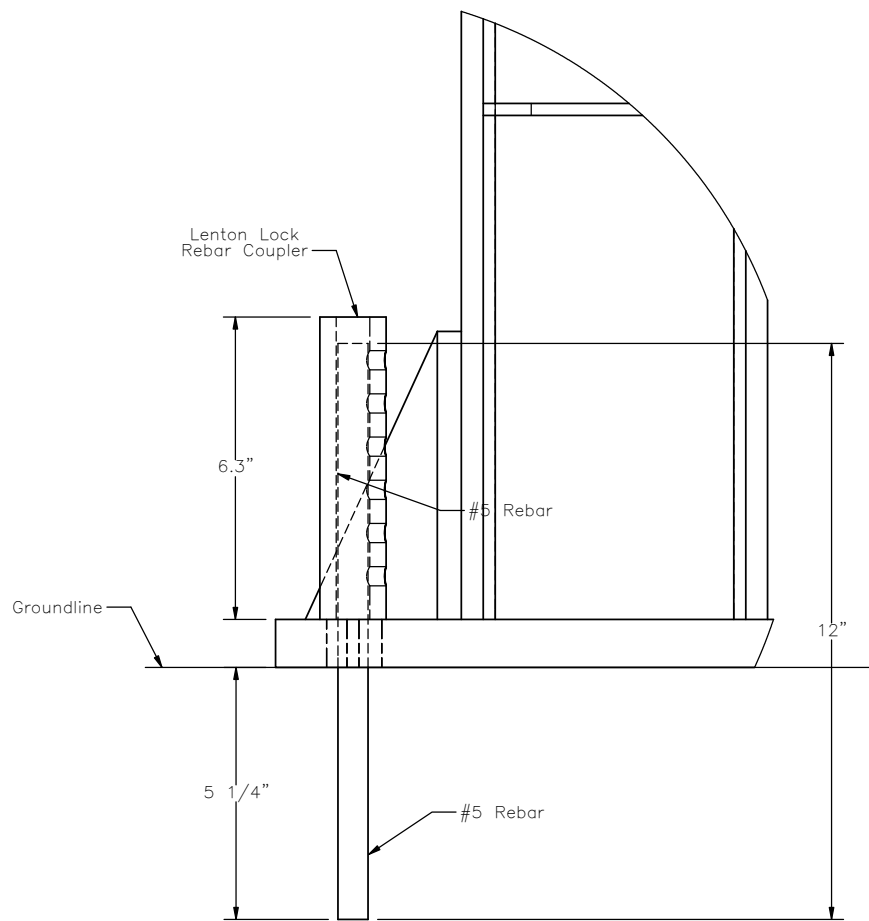


Epoxy Anchor Testing Shear Test Setup

DWG. NAME.
EpoxyAnchor test setup matrix_1-8_R7

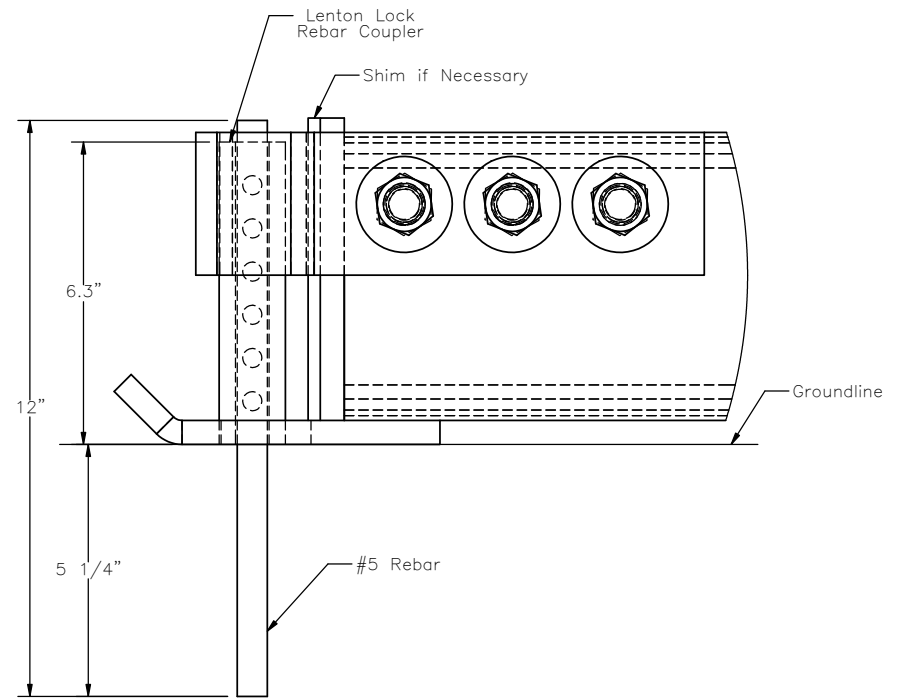
SCALE: None
UNITS: Inches

SHEET:
2 of 4
DATE:
05/09/2011
DRAWN BY:
MDM/RJT/
JGP
REV. BY:
KAL/BD



DETAIL A

Tension Testing



DETAIL B

Shear Testing

Notes: (1) Coupler is not welded to test jigs.

(2) Refer to PDF titled "Installation Instructions" for maximum rebar shear lip diameter, bolt tightening pattern, and torque specifications.

(3) Stop pin needs to be removed, refer to PDF113 for instructions.

(4) Grind out hole on shear jig's skid plate to accommodate the Lenton Lock Rebar Coupler.

(5) Insert any necessary shims between the Lenton Lock Rebar Coupler and the shear jig to obtain tight fit.



Epoxy Anchor Testing

Testing Setup Detail Views

DWG. NAME:
EpoxyAnchor test setup matrix_1-8_R7

SCALE: 1:4
UNITS: Inches

SHEET:
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DATE:
05/09/2011
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KAL/BD

Test No.	Test Type	Bar Size	Bar Coating	Embedment Depth	Spacing	Speed
WEAB-1	Tensile	#5	None	5 1/4"	Single	10 mph
WEAB-2	Tensile	#5	None	5 1/4"	Single	10 mph
WEAB-3	Tensile	#5	Epoxy	5 1/4"	Single	10 mph
WEAB-4	Tensile	#5	Epoxy	5 1/4"	Single	10 mph
WEAB-5	Shear	#5	Epoxy	5 1/4"	Single	10 mph
WEAB-6	Shear	#5	Epoxy	5 1/4"	Single	10 mph
WEAB-7	Tensile	#5	Epoxy	5 1/4"	2 @ 8"	10 mph
WEAB-8	Tensile	#5	Epoxy	5 1/4"	2 @ 8"	10 mph



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Epoxy Anchor Testing
Bogie Testing Matrix

DWG. NAME.

EpoxyAnchor test setup matrix_1-8_R7

SCALE: None

UNITS: Inches

SHEET:

4 of 4

DATE:

05/09/2011

DRAWN BY:

MDM/RJT/
JGP

REV. BY:

KAL/BD