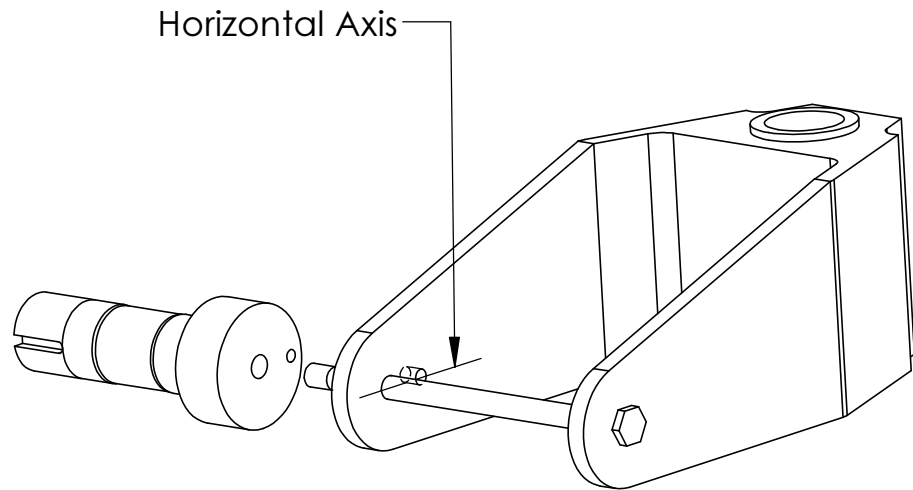
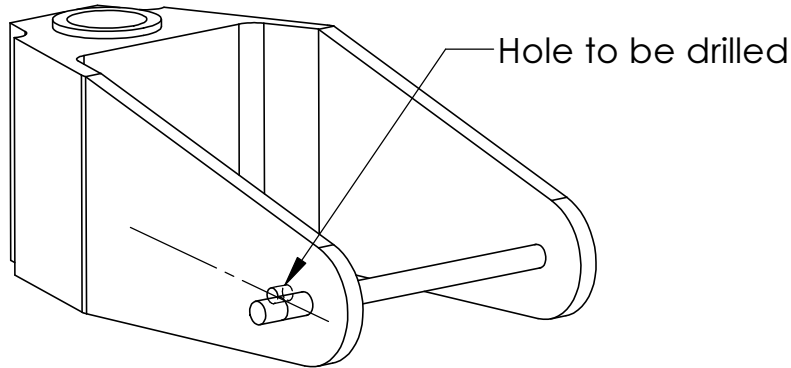


NOTE FOR WHLAXLE24 (or AXLE27 as shown in parenthesis) PREPARATION

Please complete the following steps upon first disassembly of the WHLAXLE24 from packaging:


- 1) Remove 10-24 locking bolt from axle nut (#8 bolts for AXLE27)
- 2) remove axle nut from axle
- 3) Test fit 10-24 locking bolt in each of the 8 holes in axle nut. If necessary, carefully clean threads as required using 10-24 tap. (Use 8-32 tsp for AXLE27)
- 4) Check for burrs on threads of locking bolt holes on inner diameter of axle nut
- 5) Carefully reinstall axle nut on axle and verify smooth running of threads. Deburr threads as needed for smooth turning.
- 6) Axle is ready to install

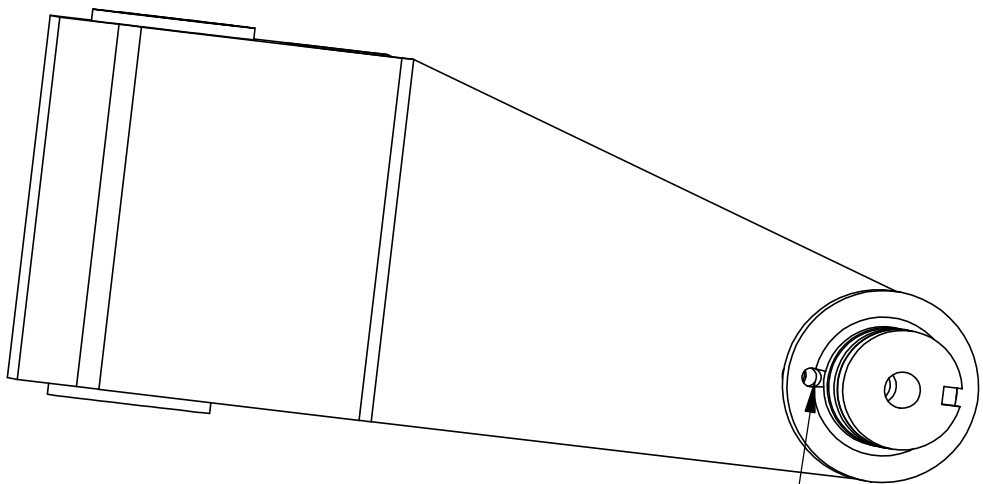


- 1) Remove Wheel.
- 2) Insert AN6 Bolt for Use as a guide. Insert from opposite side used for final installation (use AN4 bolt for AXLE27)

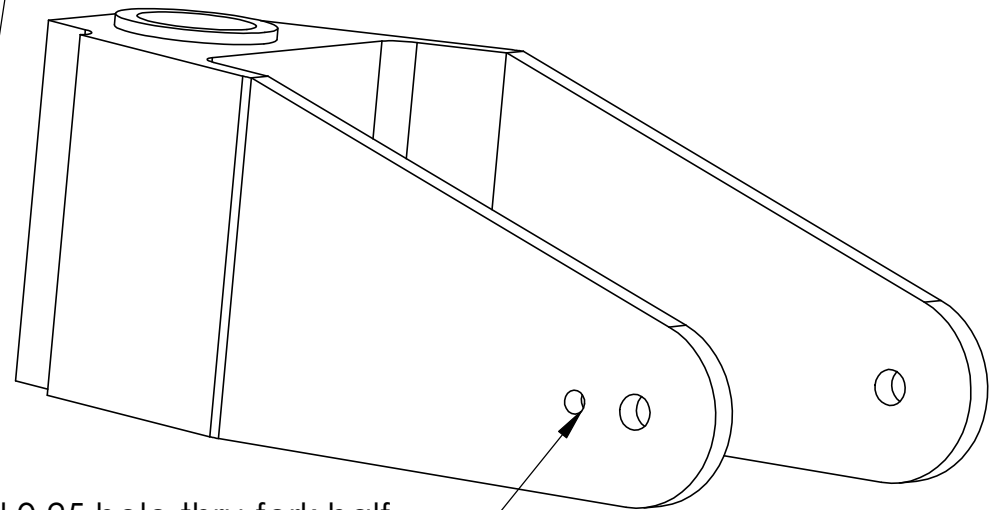
- 3) Slide WHLA24 on to AN6 Bolt with 0.25 inch hole aligned on horizontal axis of the fork hole. (AXLE27 uses AN4)

NEXT ASSY.	USED ON	QTY
APPLICATION		

MATCO mfg 2361 S 1560 West Woods Cross, Utah 84087 USA		NOMENCLATURE A24 INSTALLATION		PART NUMBER WHLAXLE24		SCALE 1:4	TOLERANCES (EXCEPT AS NOTED) DO NOT SCALE DRAWING LINEAR .XX = + .03 .XXX = + .01 ANGULAR + 1/2 CONCENTRIC + .01
		MATERIAL VARIES		DRAWING NO. MANUAL DWG/A24 Install		REVISION A	
DRAWN BY George R. Happ	FINISH	DATE 12/8/2008	CHECKED BY	SHEET 1 OF 5 SHEET SIZE A			



4) Precisely mark hole center on fork by hand using 0.1875 drill. (Use 0.125 drill for AXLE27)



5) Drill 0.25 hole thru fork half (USE 0.1875 hole for AXLE27)

NEXT ASSY.	USED ON	QTY
APPLICATION		

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NOMENCLATURE
A24 INSTALLATION

PART NUMBER
WHLAXLE24

SCALE
1:4

TOLERANCES
(EXCEPT AS NOTED)

MATERIAL
VARIES

DRAWING NO.
MANUAL DWG/A24 Install

REVISION
A

Est Wt. (lb)
-

DO NOT SCALE DRAWING
LINEAR .XX = + .03
.XXX = + .01
ANGULAR + 1/2
CONCENTRIC + .01

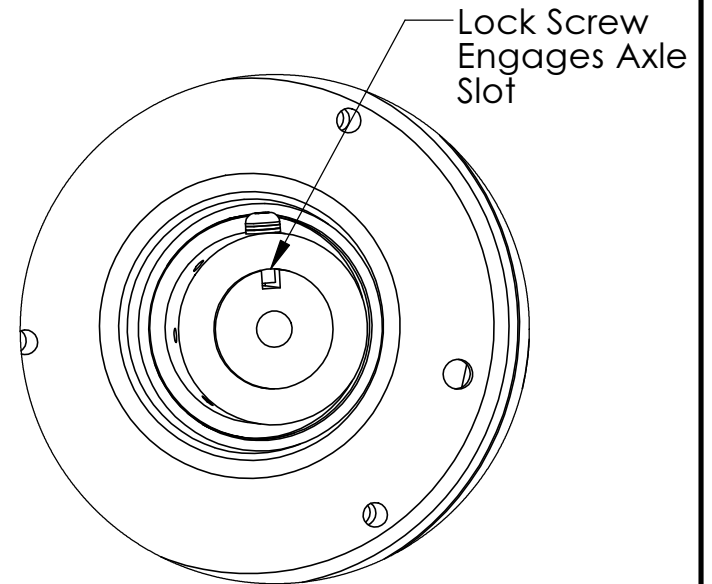
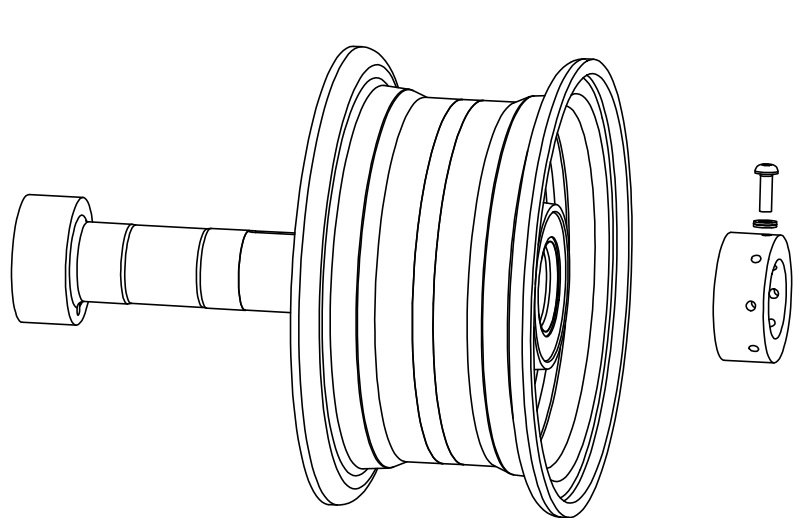
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DATE
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SHEET 2 OF 5
SHEET SIZE A



LOCK DETAIL
SHOWN INSTALLED

- 6) Pack bearings with grease. Apply grease to bearing seal edges and bore. Install bearings into wheel.
- 7) Install axle into wheel (tire not shown)
- 8) Install axle nut. Torque nut so that bearing seals do not rotate with wheel (seal face to stay stationary relative to axle as wheel is rotated)
- 9) Align nearest lock hole with axle slot that maintains preload described in #8
- 10) Insert buttonhead cap screw with Nordloc washer and tighten to prevent rotation.

NEXT ASSY.	USED ON	QTY
APPLICATION		

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NOMENCLATURE
A24 INSTALLATION

PART NUMBER
WHLAXLE24

SCALE
1:4

TOLERANCES
(EXCEPT AS NOTED)

MATERIAL
VARIES

DRAWING NO.
MANUAL DWG/A24 Install

REVISION
A

Est Wt. (lb)
-

DO NOT SCALE DRAWING

LINEAR .XX = + .03
.XXX = + .01

ANGULAR + 1/2
CONCENTRIC + .01

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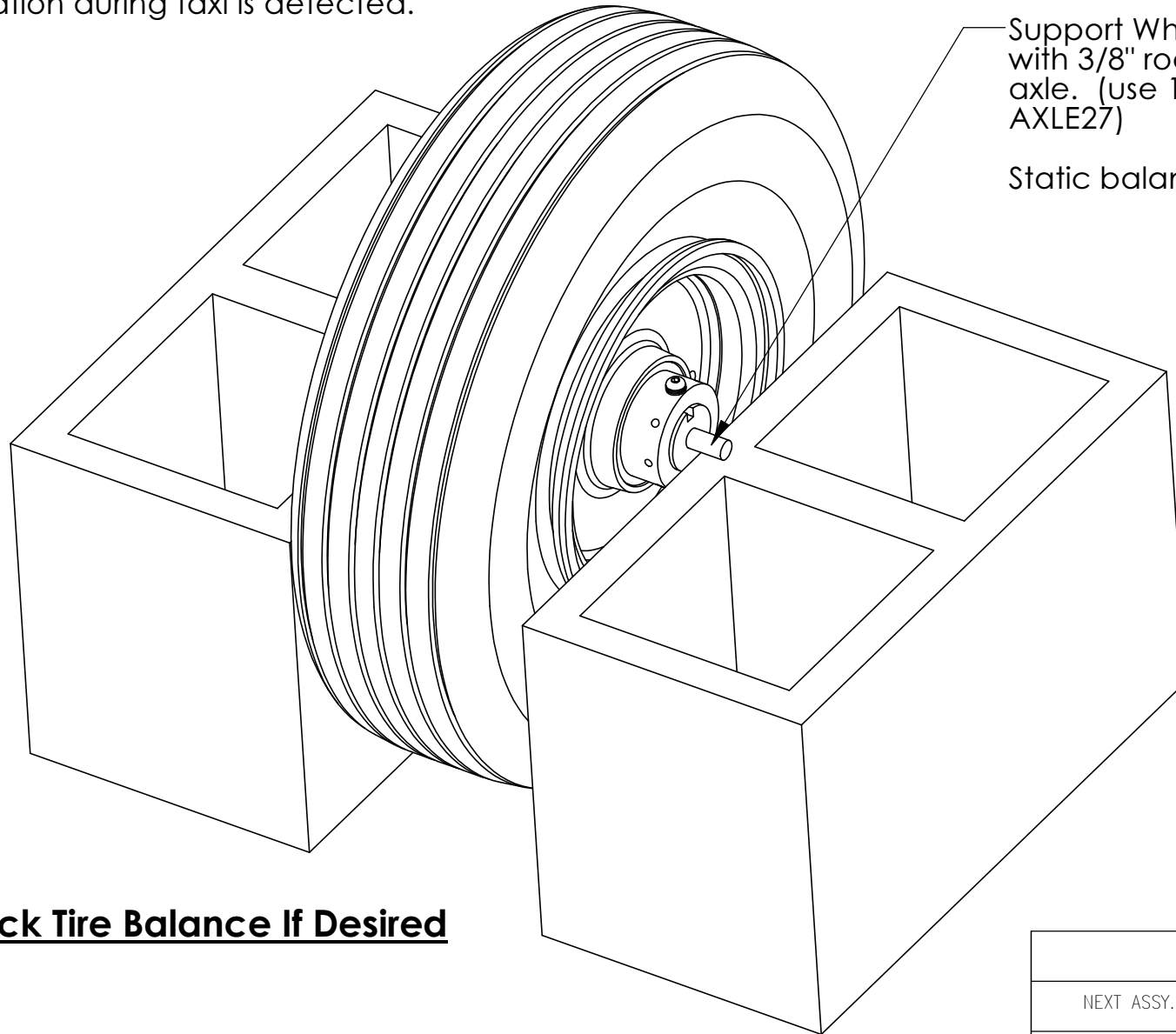
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DATE
12/8/2008

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SHEET 3 OF 5
SHEET SIZE A

NOTE: Tire balance may be important for some installations and should be verified if vibration during taxi is detected.



Support Wheel & Tire Assy with 3/8" rod inserted thru axle. (use 1/4" rod for AXLE27)

Static balance as desired.

Check Tire Balance If Desired

NEXT ASSY.	USED ON	QTY
APPLICATION		

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NOMENCLATURE
BALANCE, TIRE

MATERIAL
VARIES

PART NUMBER
TIRE BALANCE

DRAWING NO.
MANUAL DWG/A24 Install

SCALE
1:8

REVISION
A

Est Wt. (lb)
-

TOLERANCES
(EXCEPT AS NOTED)

DO NOT SCALE DRAWING
 LINEAR .XX = + .03
 .XXX = + .01
 ANGULAR + 1/2
 CONCENTRIC + .01

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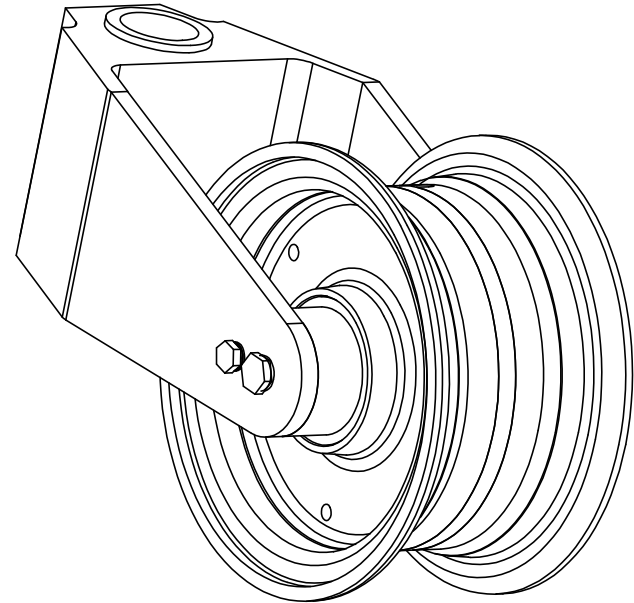
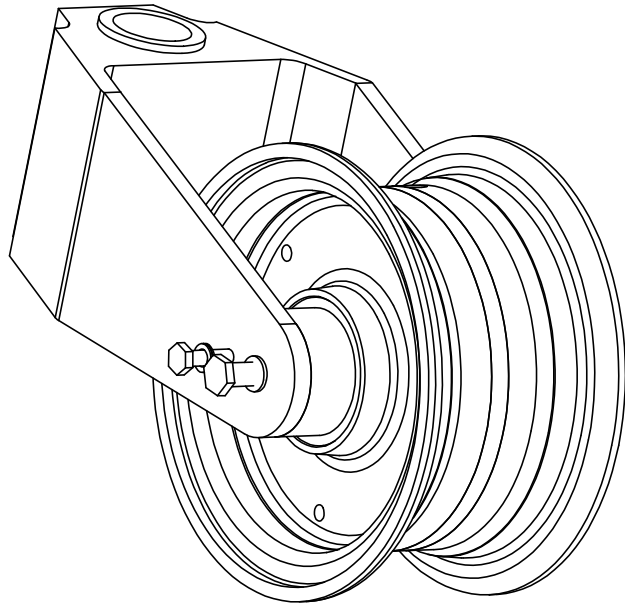
FINISH

DATE
12/8/2008

CHECKED BY

SHEET 4 OF 5
SHEET SIZE A


Note: Install one WHLA24SP spacer on each end of WHLA24 axle for 5.25 width fork (RV-10)



11) Mount wheel/axle assembly in fork aligning 0.25" fork hole with threaded hole in axle base. Install axle thru-bolt. (aligns with 0.1875 hole for AXLE27)

12) Set final torques and assembly is ready for use

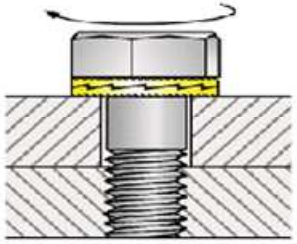
NEXT ASSY.	USED ON	QTY
APPLICATION		

MATCO mfg 2361 S 1560 West Woods Cross, Utah 84087 USA 	NOMENCLATURE A24 INSTALLATION		PART NUMBER WHLAXLE24		SCALE 1:8	TOLERANCES (EXCEPT AS NOTED) DO NOT SCALE DRAWING LINEAR .XX = + .03 .XXX = + .01 ANGULAR + 1/2 CONCENTRIC + .01
	MATERIAL VARIES		DRAWING NO. MANUAL DWG/A24 Install		REVISION A	
DRAWN BY George R. Happ	FINISH	DATE 12/8/2008	CHECKED BY	SHEET 5 OF 5 SHEET SIZE A		

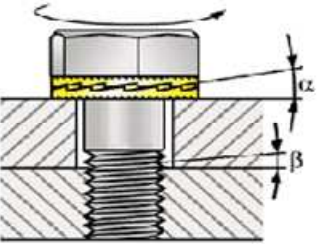
NORD-LOCK Washers



NORD-LOCK is a pair of washers with a wedge-locking action meeting DIN 25201 which is a unique method using tension instead of friction. The rise of the cams between the NORD-LOCK washers is greater than the pitch of the bolt. In addition, there are radial teeth on the opposite side. The washers are installed in pairs, cam face to cam face.



When the bolt and/or nut is tightened the teeth grip and seat the mating surfaces. The NORD-LOCK washer is locked in place, allowing movement only across the face of the cams. Any attempt from the bolt/nut to rotate loose is blocked by the wedge effect of the cams.



Here you see what happens when a bolt is untightened with a wrench. The pair of washers expand more than the corresponding pitch of the thread allows the bolt/nut to rise.

NORD-LOCK washers positively lock the fastener in a joint which is subjected to any kind of vibration or dynamic loads.

REPLACE the NORD-LOCK washers if the cam surface is worn and corners are rounded or if the pair does not seat cleanly against each other