

Labour time allowance chart for warranty repair work

for Trailer Axles and Suspension Systems



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Labour time allowance for axles with INTEGRAL disc brakes

Standard repair packages 4

Axle types: SK RB 9019 / 9022 *INTEGRAL*, BI9-19K, BI9-19K, BIL9-19K, SI9-19K, ZI9-19K, ZI11-19K, BI9-19W, BI9-19W, BIL9-19W, SI9-19W, ZI9-19W, BI9-22K01, BA9-22K01, BIL9-22K01, SI9-22K01, SI11-22K01, ZI9-22K01, ZI11-22K01, BI9-22W, BIL9-22W, SI9-22W, SI11-22W, ZI9-22W, ZI11-22W..... 4

Standard single repairs 5

Axle types: SK RB 9019 / 9022 *INTEGRAL*, BI9-19K, BI9-19K, BIL9-19K, SI9-19K, ZI9-19K, ZI11-19K, BI9-19W, BI9-19W, BIL9-19W, SI9-19W, ZI9-19W, BI9-22K01, BA9-22K01, BIL9-22K01, SI9-22K01, SI11-22K01, ZI9-22K01, ZI11-22K01, BI9-22W, BIL9-22W, SI9-22W, SI11-22W, ZI9-22W, ZI11-22W..... 5

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Standard repair packages 6

Axle types: SK RB 9019 / 9022, SK RS 9019 / 9022, SK RZ 9019 / 9022, B9-19K, BL9-19K, B9-19W, BL9-19W, B9-22K01, BL9-22K01, B9-22W, BL9-22W 6

Standard single repairs 7

Axle types: SK RB 9019 / 9022, SK RS 9019 / 9022, SK RZ 9019 / 9022, B9-19K, BL9-19K, B9-19W, BL9-19W, B9-22K01, BL9-22K01, B9-22W, BL9-22W 7

Labour time allowance for axles with drum brakes

Standard repair packages 8

Axle types: SK RS 9030 / 9037 / 9042, SK RZ 9030 / 9037 / 9042, Z9-3020, ZL9-3020, Z11-3020, ZL11-3020, S9-3718, SL9-3718, Z9-3720, ZL9-3720, Z11-3720, ZL11-3720, S9-4218, SL9-4218, S11-4220, SL11-4220, SZL11-4220, Z9-4218, ZL9-4218, Z11-4220, ZL11-4220..... 8

Standard single repairs 9

Axle types: SK RS 9030 / 9037 / 9042, SK RZ 9030 / 9037 / 9042, Z9-3020, ZL9-3020, Z11-3020, ZL11-3020, S9-3718, SL9-3718, Z9-3720, ZL9-3720, Z11-3720, ZL11-3720, S9-4218, SL9-4218, S11-4220, SL11-4220, SZL11-4220, Z9-4218, ZL9-4218, Z11-4220, ZL11-4220..... 9

Vehicle preparation time, once-only 20 minutes per vehicle including

- Vehicle brought into work place
- Vehicle secured in accordance with standard safety working practices
- Axle jacked up
- Inspection of the components for re-use, clean or replace as necessary
- Tighten bolts and nuts in accordance with the SAF recommended torque setting
- Prepare any defective parts available for inspection by SAF

Procedures, which are not included in this labour time allowance catalogue, must be justified and prior authorisation given by SAF Service department before any repair work is carried out.

Service Report

In the event of damage, always first complete the SAF Service Report: available over the Internet:

www.safholland.com

SAF Service Report must be completed fully and accurately (in particular the figures from the axle type plate, i.e. the serial number is absolutely necessary):

Type plate up to mid-2004

SAF OTTO SAUER AXSFENFABRIK KEILBERG D-63854 BESENENBACH / G E R M A N Y			
TYP	SKRB 9019 WI		
Ident.-No. /Prod.-No.	147 83 35 7 49	000 00 0 000	
zul. Last kg perm. cap. charge adm.	STAT. 900	TECH. 1100	v max. km/h max. speed vitesse maxi.
TDB-No.	0678	Grundtyp	SBW 1937-115

Type plate from mid-2004

SAF-HOLLAND GMBH D-63856 BESENENBACH • GERMANY		SAF Holland	
Version	SKRB9022WI	Serial No.	229 04 3 229
Type	SBW2243-115	Ident No.	247 96 38 7 48 1
Test Report	36110702	Perm axle cap. stat.	9000 kg
		V max.	105 km/h
AN 1280397		SN 229043229	

Identification in case of type plate absence:

serial no. on right of axle spindle
end in the driving direction



All labour time allowances are continuously updated according to technical demands. The updates are available under:

www.safholland.com

We recommend SAF Original spare parts for all repairs.

Warranty Claim Administration time (handling costs)

No.		Minutes
S10001	Administration time allowance for handling the warranty claim, processing and the claim acceptance for SAF Service-Partner / Competence Partner and Service 24	45
S10002	Administration time allowance for handling the warranty claim, processing and the claim acceptance without inspection of claimed warranty parts for SAF Subsidiary / National agent	15
S10003	Administration time allowance for handling the warranty claim, processing and the claim acceptance with inspection of, and responsibility for, claimed warranty parts for SAF Subsidiary / National agent	30
S10010	Additional (must be separately quoted in the invoice)	
S10011	Labour time for road side assistance	According expenses
S10012	Travelling kilometres for road side assistance	According expenses

Standard repair packages

Axle types: SK RB 9019 / 9022 *INTEGRAL*, BI9-19K, BI9-19W, BIL9-19K, SI9-19K, ZI9-19K, ZI11-19K, BI9-19W, BIL9-19W, SI9-19W, ZI9-19W, BI9-22K01, BA9-22K01, BIL9-22K01, SI9-22K01, SI11-22K01, ZI9-22K01, ZI11-22K01, BI9-22W, BIL9-22W, SI9-22W, SI11-22W, ZI9-22W, ZI11-22W

No.		Minutes
S11101	Vehicle preparation time, once-only per vehicle including <ul style="list-style-type: none"> • Vehicle brought into work place • Vehicle secured in accordance with standard safety working practices • Axle jacked up 	20
S20201	1 side Pads – remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove pads • Check brake calliper for free sliding movement • Check rubber boots • Refit new pads • Adjust running clearance of pads 	20
S20202	1 Brake calliper – remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove and refit pads • Remove and refit brake chamber • Remove and refit new brake calliper • Adjust running clearance of pads 	45
S20203	1 <i>INTEGRAL</i> Hub Unit or 1 brake disc and 1 brake calliper – remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove and refit pads • Remove and refit brake chamber • Remove and refit brake calliper • Remove and refit hub cap • Remove and refit axle nut • Remove and refit <i>INTEGRAL</i> hub unit including brake disc • Disassemble and assemble <i>INTEGRAL</i> hub unit and brake disc • Clean axle stub and apply fresh fitting paste • Adjust running clearance of pads • Adjust ABS-Sensor 	70
S11102	Test the braking performance on the rolling-road test stand	15

Standard single repairs

Axle types: SK RB 9019 / 9022 *INTEGRAL*, BI9-19K, BI9-19K, BIL9-19K, SI9-19K, ZI9-19K, ZI11-19K, BI9-19W, BI9-19W, BIL9-19W, SI9-19W, ZI9-19W, BI9-22K01, BA9-22K01, BIL9-22K01, SI9-22K01, SI11-22K01, ZI9-22K01, ZI11-22K01, BI9-22W, BIL9-22W, SI9-22W, SI11-22W, ZI9-22W, ZI11-22W

No.		Minutes
S11101	Vehicle preparation time, once-only per vehicle including <ul style="list-style-type: none"> • Vehicle brought into work place • Vehicle secured in accordance with standard safety working practices • Axle jacked up 	20
S20301	1 Wheel remove and refit	10
S20303	1 Parking brake or standard brake chamber remove, replace and refit	10
S20304	10 Wheel bolts remove, replace and refit	20
S20305	1 ABS Sensor remove, replace, refit and adjust	15
S20306	1 Brake calliper overhaul. Brake calliper is removed from axle. <ul style="list-style-type: none"> • Remove, replace and refit thrust pieces, guide pins, bushes, seals and rubber boots 	80
S20307	1 Complete axle remove and refit <ul style="list-style-type: none"> • Fit brake chambers, shock absorbers, air bags and wheels • Adjust axle alignment • Adjust running clearance of pads • Fit and adjust ABS-Sensor 	210
S20308	1 Axle beam remove and refit <ul style="list-style-type: none"> • Fit <i>INTEGRAL</i> hub unit with brake disc • Fit brake callipers, brake chambers, shock absorbers, air bags and wheels • Set axle alignment • Adjust running clearance of pads • Fit and adjust ABS-Sensor 	280
S20309	1 Air bag remove, replace and refit	40
S20310	1 Shock absorber remove, replace and refit	15
S20311	1 Lift air bag remove, replace and refit	20
S20312	1 Lift arm assembly including lift air bag remove, replace and refit	60
S20313	1 HD-Bush or 3-D-bearing bush remove, replace and refit	60
S20314	1 Trailing arm (MODUL suspension) remove, replace and refit	80
S20315	1 Axle alignment check	60
S20316	Each further axle alignment check	30
S20317	1 Self-steering knuckle remove, replace and refit. The axle and brake are dismantled.	120
S20318	1 Stabilising damper for self-steering axle remove and refit	10
S20319	1 Locking cylinder for self-steering axle remove and refit	10
S20320	1 EBS / ABS memory print out diagnostics report	10
S20321	1 Brake performance test report for the laden truck/trailer brake compatibility	30
S11102	Test the braking performance on the rolling-road test stand	15

Standard repair packages

Axle types: SK RB 9019 / 9022, SK RS 9019 / 9022, SK RZ 9019 / 9022,
B9-19K, BL9-19K, B9-19W, BL9-19W, B9-22K01, BL9-22K01, B9-22W, BL9-22W

No.		Minutes
S11101	Vehicle preparation time, once-only per vehicle including <ul style="list-style-type: none"> • Vehicle brought into work place • Vehicle secured in accordance with standard safety working practices • Axle jacked up 	20
S30201	1 side Pads - remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove pads • Check brake calliper for free sliding movement • Check rubber boots • Refit new pads • Adjust running clearance of pads 	20
S30202	1 Brake calliper – remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove and refit pads • Remove and refit brake chamber • Remove and refit new brake calliper • Adjust running clearance of pads 	45
S30204	1 Brake calliper and 1 brake disc – remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove and refit pads • Remove and refit brake chamber • Remove and refit brake calliper • Remove, replace and refit wheel flange and brake disc • Clean axle stub and apply fresh fitting paste • Adjust running clearance of pads 	60
S30205	1 Hub unit, 1 brake calliper and 1 brake disc - remove, replace and refit <ul style="list-style-type: none"> • Release parking brake • Remove and refit wheel • Release brake calliper on adjuster screw • Remove and refit pads • Remove and refit brake chamber • Remove, replace and refit brake calliper • Remove and refit wheel flange and brake disc • Remove and refit axle nut • Remove, replace and refit hub unit • Clean axle stub and apply fresh fitting paste • Adjust running clearance of pads • Adjust ABS-Sensor 	75
S11102	Test the braking performance on the rolling-road test stand	15

Standard single repairs

Axle types: SK RB 9019 / 9022, SK RS 9019 / 9022, SK RZ 9019 / 9022,
 B9-19K, BL9-19K, B9-19W, BL9-19W, B9-22K01, BL9-22K01, B9-22W, BL9-22W

No.		Minutes
S11101	Vehicle preparation time, once-only per vehicle including <ul style="list-style-type: none"> • Vehicle brought into work place • Vehicle secured in accordance with standard safety working practices • Axle jacked up 	20
S30301	1 Wheel remove and refit	10
S30302	1 Twin wheels remove and refit	15
S30303	1 Parking brake or standard brake chamber remove, replace and refit	10
S30304	10 Wheel bolts remove, replace and refit. The hub unit is dismantled.	20
S30305	1 ABS Sensor remove, replace, refit and adjust	15
S30306	1 Brake calliper overhaul. Brake calliper is removed from axle. <ul style="list-style-type: none"> • Remove, replace and refit thrust pieces, guide pins, bushes, seals and rubber boots 	80
S30307	1 Complete axle remove and refit <ul style="list-style-type: none"> • Fit brake chambers, shock absorbers, air bags and wheels • Adjust axle alignment • Adjust running clearance of pads • Fit and adjust ABS-Sensor 	210
S30308	1 Axle beam remove and refit <ul style="list-style-type: none"> • Fit hub unit, brake discs, brake callipers, brake chambers, shock absorbers, air bags and wheels • Set axle alignment • Adjust running clearance of pads • Fit and adjust ABS-Sensor 	280
S30309	1 Air bag remove, replace and refit	40
S30310	1 Shock absorber remove, replace and refit	15
S30311	1 Lift air bag remove, replace and refit	20
S30312	1 Lift arm assembly including lift air bag remove, replace and refit	60
S30313	1 HD-Bush or 3-D-bearing bush remove, replace and refit	60
S30314	1 Trailing arm (MODUL suspension) remove, replace and refit	80
S30315	1 Axle alignment check	60
S30316	Each further axle alignment check	30
S30317	1 Self-steering knuckle remove, replace and refit. The axle and brake are dismantled.	120
S30318	1 Stabilising damper for self-steering axle remove and refit	10
S30319	1 Locking cylinder for self-steering axle remove and refit	10
S30320	1 EBS / ABS memory print out diagnostics report	10
S30321	1 Brake performance test report for the laden truck/trailer brake compatibility	30
S11102	Test the braking performance on the rolling-road test stand	15

Standard repair packages

Axle types: SK RS 9030 / 9037 / 9042, SK RZ 9030 / 9037 / 9042, Z9-3020, ZL9-3020, Z11-3020, ZL11-3020, S9-3718, SL9-3718, Z9-3720, ZL9-3720, Z11-3720, ZL11-3720, S9-4218, SL9-4218, S11-4220, SL11-4220, SZL11-4220, Z9-4218, ZL9-4218, Z11-4220, ZL11-4220

No.		Minutes
S11101	Vehicle preparation time, once-only per vehicle including <ul style="list-style-type: none"> • Vehicle brought into work place • Vehicle secured in accordance with standard safety working practices • Axle jacked up 	20
S40206	1 Hub and 1 brake drum remove and refit, with mounted wheel, inspect the brake on one side of the wheel <ul style="list-style-type: none"> • Release parking brake • Release brake shoes by resetting the slack adjuster • Remove and refit hub cap • Remove and refit axle nut • Remove and refit hub with brake drum and wheel • Clean axle stub and apply fresh fitting paste • Adjust the hub bearing running clearance as necessary • Adjust running clearance of brake linings 	10
S40207	1 Hub, 1 brake drum, brake shoes and brake linings - remove, replace and refit <ul style="list-style-type: none"> • Wheel / twin wheels remove and refit • Release parking brake • Release brake shoes by resetting the slack adjuster • Remove and refit hub cap • Remove and refit axle nut • Remove and refit hub and brake drum • Remove and refit brake shoes • Remove, replace and refit brake linings • Clean brake shoes / lining mating surfaces and cover with corrosion inhibitor • Check and replace camshaft bearings as necessary (for additional labour time allowance see below) • Apply copper paste to the brake shoe anchors and cam roller journals • Remove, replace and refit brake drum from hub or machine the brake drum radius (for additional labour time allowance see below) • Replace shoe return spring and shoe retaining clamp • Machine new brake lining surface to brake drum diameter • Check, re-grease and replace hub bearing as necessary (for additional labour time allowance see below) • Clean and apply fitting paste to axle stub • Adjust the hub bearing clearance as necessary • Adjust running clearance of brake linings • Adjust ABS-Sensor 	85
S11102	Test the braking performance on the rolling-road test stand	15

Standard single repairs

Axle types: SK RS 9030 / 9037 / 9042, SK RZ 9030 / 9037 / 9042, Z9-3020, ZL9-3020, Z11-3020, ZL11-3020, S9-3718, SL9-3718, Z9-3720, ZL9-3720, Z11-3720, ZL11-3720, S9-4218, SL9-4218, S11-4220, SL11-4220, SZL11-4220, Z9-4218, ZL9-4218, Z11-4220, ZL11-4220

No.		Minutes
S11101	Vehicle preparation time, once-only per vehicle including <ul style="list-style-type: none"> • Vehicle brought into work place • Vehicle secured in accordance with standard safety working practices • Axle jacked up 	20
S40301	1 Wheel remove and refit	10
S40302	1 Twin wheels remove and refit	15
S40322	1 Camshaft inclusive bushing remove, replace and refit <ul style="list-style-type: none"> • The brake drums and shoes are dismantled • Remove and refit slack adjuster 	15
S40323	1 Hub or 1 set hub bearings remove, replace and refit. The hub is dismantled.	20
S40324	1 Brake drum radius machined	10
S40325	1 Parking brake / standard brake chamber remove, replace and refit	15
S40326	1 Slack adjuster remove, replace and refit	15
S40304	10 Wheel bolts remove, replace and refit. The hub is dismantled.	20
S40305	1 ABS Sensor remove, replace, refit and adjust	15
S40307	1 Complete axle remove and refit <ul style="list-style-type: none"> • Fit brake chambers, shock absorbers, air bags and wheels • Adjust axle alignment • Adjust running clearance of pads • Fit and adjust ABS-Sensor 	210
S40309	1 Air bag remove, replace and refit	40
S40310	1 Shock absorber remove, replace and refit	15
S40311	1 Lift air bag remove, replace and refit	20
S40312	1 Lift arm assembly inclusive lift air bag remove, replace and refit	60
S40313	1 HD-Bush or 3-D-bearing bush remove, replace and refit	60
S40314	1 Trailing arm (MODUL suspension) remove, replace and refit	80
S40315	1 Axle alignment check	60
S40316	Each further axle alignment check	30
S40317	1 Self-steering knuckle remove, replace and refit. The axle and brake are dismantled.	120
S40318	1 Stabilising damper for self-steering axle remove and refit	10
S40319	1 Locking cylinder for self-steering axle remove and refit	10
S40320	1 EBS / ABS memory print out diagnostics report	10
S40321	1 Brake performance test report for the laden truck/trailer brake compatibility	30
S11102	Test the braking performance on the rolling-road test stand	15

We are always there for you

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