



Truck & Bus Tyre

TECHNICAL MANUAL

REGROOVING GUIDE

Regrooving introduction

Regrooving technical data

R_{EGROOVING} INTRODUCTION

INTRODUCTION

A regrooved tyre means a tyre, either new or retreaded, on which a tread pattern has been produced by cutting into the tread in accordance with the tyre manufacturer's recut tread pattern. Recut tread patterns for Hankook tyres are contained in this manual.

Regrooving of truck tyres requires fully trained operators.

- Use only regrooving tools with electrically heated blades.
- Determine the blade setting depth for each individual tyre by referring to the following tables.
- Set the blade in the cutter head to the specified depth.
- While regrooving hold the cutter so that the underside of the cutting head is flat against the tread surface. Heating of the blade starts automatically as the blade penetrates the rubber.

A minimum depth of remaining undertread rubber is required to avoid :

- Damage of the top steel belt
- Rib tearing caused by groove cracking
- Stone damage

After regrooving, the tyre should be free of any defects (cracks, separations exposed ply or cord) visible on either the mounted or demounted tyre.

TECHNICAL REQUIREMENTS

Tyre must be demounted from the rim before regrooving

Inspection :

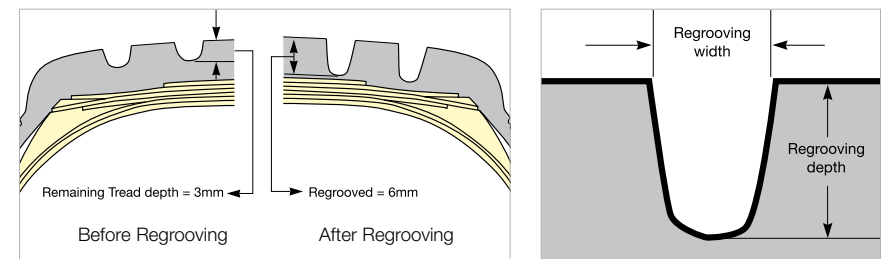
- Before regrooving check to see that there is no damage on any part of the tyre.
- Remove stones which may have embedded into the grooves and other foreign objects, such as nails from the tread; repair if necessary.
- Particular care should be exercised in selecting a tyre for regrooving where the tread area is in any way damaged (eg : chipping, tearing, and cutting due to abnormal operating conditions)
- Where a tyre has worn abnormally it may be possible to regroove that part of the worn tyre, provided that a sufficient amount of the original groove is visible before regrooving.

It is recommended that the minimum remaining tread depth be between 2mm & 3mm before regrooving. The tread depth should be measured around the circumference at 4 places to find the minimum remaining depth. Set the cutter blade for the recommendations as shown in this publication.

Please make sure that you regroove Hankook Steel Radials to the patterns, depths and widths recommended in this manual to ensure good service from your tyres.

After regrooving, your tyre should be free from defects. It is most important to ensure that the belts under the tread have not been exposed.

REGROOVING RECOMMENDATIONS



R_{EGROOVING} TECHNICAL DATA

Long Haul

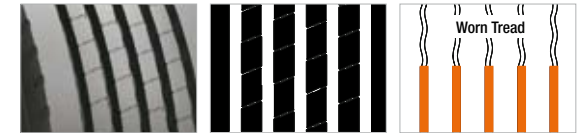
AL10
e-cube



New Tread

Regrooved Tread

TL10
e-cube



New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
80	295/80R22.5	152/148M	16	*		13.5	3.0	8.0
	315/80R22.5	156/150L(154/150M)	18	*		14.0	3.0	9.0
70	315/70R22.5	154/150L(152/148M)	18	*		13.5	3.0	8.0
60	295/60R22.5	150/147K(149/146L)	16	*		13.0	3.0	9.0
	315/60R22.5	152/148L	16	*		13.5	3.0	8.0
55	385/55R22.5	160J(158L)	18	*		14.5	3.0	9.0

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
70	275/70R22.5	160J	18	*		12.6	3.0	10.0
65	385/65R22.5	158L(160J)	18	*		15.5	3.0	10.0
45	445/45R19.5	160J	22	*		13.5	3.0	8.0

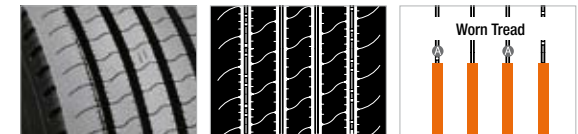
DL10
e-cube



New Tread

Regrooved Tread

AL02



New Tread

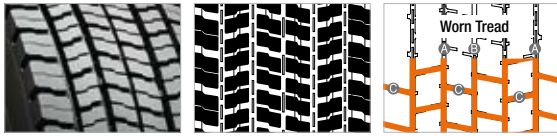
Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
80	295/80R22.5	152/148M	16	*		17.5	3.0	10.0
	315/80R22.5	156/150L(154/150M)	18	*		18.0	3.0	10.0
70	315/70R22.5	154/150L(152/148M)	18	*		17.5	3.0	10.0
60	295/60R22.5	150/147K(149/146L)	16	*		19.0	3.0	10.0
	315/60R22.5	152/148L	16	*		19.5	3.0	10.0

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	11R22.5	148/145M	16	*		15.0	3.0	12.0
	12R22.5	152/148L	16	*		15.5	3.0	12.0
80	275/80R22.5	148/145M	16	*		15.5	3.0	12.0
70	255/70R22.5	140/137M	16	*		13.5	3.0	12.0
	275/70R22.5	148/145M	16	*		15.0	3.5	12.0
	305/70R22.5	152/148L(150/148M)	16	*		15.5	3.5	12.0

Medium Haul

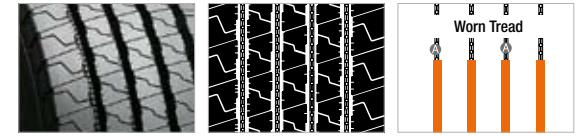
DLO2



New Tread

Regrooved Tread

AH11



New Tread

Regrooved Tread

SRS	Size	PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
			T/T	T/L			
TUBELESS							
	11R22.5	148/145M	16	*	20.5	3.5	8.0
	12R22.5	152/148L	16	*	21.0	3.5	8.0
70	275/70R22.5	148/145M(150/148L)	16	*	18.0	3.5	8.0

AL15



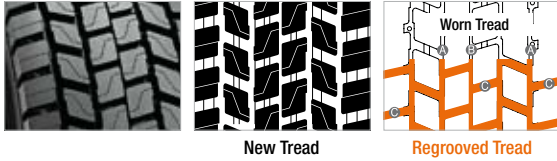
New Tread

Regrooved Tread

SRS	Size	PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
			T/T	T/L			
TUBELESS							
65	385/65R22.5	158L(160J)	18	*	15.5	3.0	12.0

SRS	Size	PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
			T/T	T/L			
TUBELESS							
	8R17.5	117/116L	10	*	13.0	3.0	8.0
	8R19.5	124/122L	12	*	13.0	3.0	8.0
	8.5R17.5	121/120L	12	*	13.0	3.0	9.0
	9.5R17.5	129/127L	14	*	14.5	3.0	9.0
	9.5R17.5	131/129L	16	*	14.5	3.0	9.0
	10R22.5	141/139L	14	*	13.5	3.5	11.0
	13R22.5	156/150L	18	*	16.5	3.5	11.0
75	205/75R17.5	124/122M	12	*	13.5	3.0	8.0
	215/75R17.5	126/124M	12	*	13.0	3.0	8.0
	225/75R17.5	129/127M	12	*	13.0	3.0	8.0
	235/75R17.5	132/130M	14	*	14.0	3.0	8.0
70	245/70R19.5	136/134M	14	*	13.5	3.0	10.0
	265/70R19.5	140/138M	14	*	13.5	3.0	10.0
	285/70R19.5	145/143M	16	*	13.5	3.0	11.0
	305/70R19.5	148/145M	16	*	14.5	3.5	11.0
TUBE TYPE							
	900R20	140/137L	14	*	13.5	4.0	8.0
	1000R20	147/143L	16	*	16.0	3.0	8.0
	1100R20	150/146L	16	*	16.0	4.0	8.0

DH05



New Tread

Regrooved Tread

TH22



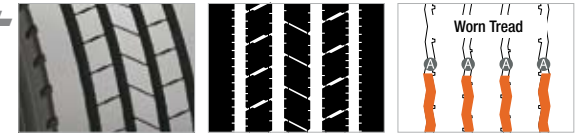
New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	8R17.5	117/116L	10	*		14.0	3.0	6.0
	8.5R17.5	121/120L	12	*		15.5	3.0	6.0
	9.5R17.5	131/129L	16	*		16.5	3.0	6.0
	11R22.5	148/145L	16	*		21.0	3.0	10.0
	12R22.5	152/148L	16	*		22.5	3.0	10.0
80	295/80R22.5	152/148M	16	*		23.0	3.0	10.0
	315/80R22.5	154/150M(156L)	18	*		23.5	3.0	10.0
75	205/75R17.5	124/122M	12	*		15.5	3.0	8.0
	215/75R17.5	126/124M	12	*		15.0	3.0	8.0
	225/75R17.5	129/127M	12	*		16.0	3.0	8.0
	235/75R17.5	132/130M	14	*		15.5	3.0	8.0
70	245/70R17.5	136/134M	14	*		15.5	3.0	8.0
	245/70R19.5	137/135M	14	*		16.0	3.0	10.0
	265/70R19.5	140/138M	14	*		16.0	3.0	10.0
	285/70R19.5	145/143M	16	*		17.0	3.0	10.0
	305/70R19.5	148/145M	16	*		18.5	3.0	10.0
	315/70R22.5	154/150L	18	*		19.5	3.0	10.0
TUBE TYPE								
	1000R20	147/143L	16	*		21.0	3.0	8.0
	1100R20	150/146L	16	*		22.5	3.0	10.0

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
55	385/55R22.5	160J(158L)	18	*		17.0	3.0	12.0
65	385/65R22.5	160J(158L)	18	*		17.0	3.0	12.0

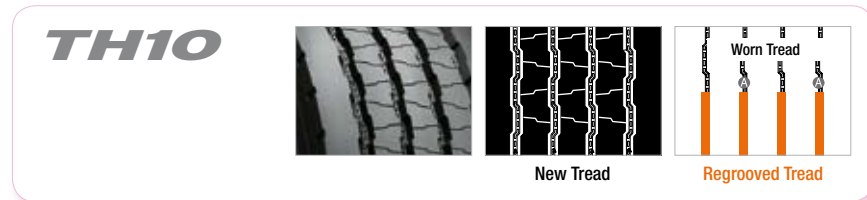
AH22+



New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
70	245/70R17.5	136/134M	14	*		13.5	3.0	10.0
	315/70R22.5	154/150L	18	*		14.5	3.0	9.5
80	295/80R22.5	152/148M	16	*		16.5	3.0	8.0
	315/80R22.5	156/150L(154/150M)	18	*		16.5	3.0	8.0
AH22								
	11R22.5	148/145L	16	*		16.0	3.0	8.0
	12R22.5	152/145L	16	*		16.0	3.0	8.0

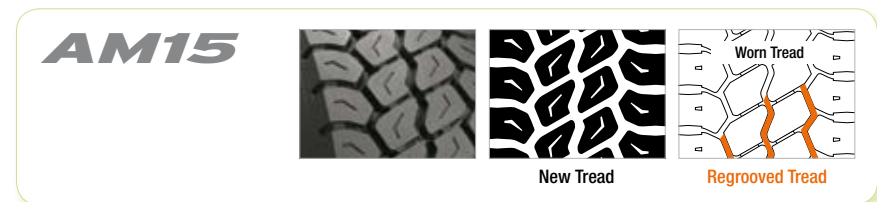


SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	9.5R17.5	143/141J	18	*		13.5	3.0	13.0
75	215/75R17.5	135/133J	16	*		13.0	3.0	13.0
	235/75R17.5	143/141J	16	*		12.5	3.0	13.0
70	245/70R17.5	143/141J	16	*		12.5	3.0	13.0
	245/70T19.5	141/140J	16	*		12.5	3.0	13.0
	265/70R19.5	143/141J	18	*		13.5	3.0	13.0
	285/70R19.5	150/148J	18	*		14.5	3.0	13.0
65	425/65R22.5	165K	18	*		16.5	3.0	15.0
55	385/55R22.5	160J(158L)	18	*		15.5	3.0	15.0

Mixed Service (on & off)

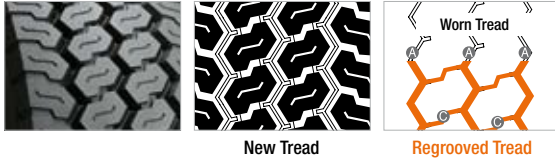


SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	10R22.5	144/142K	16	*		14.5	3.0	10.0
	11R22.5	148/145K	16	*		18.5	4.0	12.0
	12R22.5	152/148K	16	*		18.5	4.0	12.0
	13R22.5	154/150K(156/150G)	18	*		18.5	4.0	12.0
80	295/80R22.5	152/148K	16	*		18.0	4.0	12.0
	315/80R22.5	156/150K	18	*		18.5	4.0	12.0
TUBE TYPE								
	900R20	141/139K	14	*		14.5	3.0	10.0
	1100R20	150/146K	16	*		18.5	4.0	12.0



SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
65	385/65R22.5	158L(160J)	18	*		18	3.0	12.0

AM02



New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
70	265/70R19.5	143/141J	18	*		16.5	4.0	10.0
	275/70R22.5	148/145K	16	*		17.5	4.0	10.0
65	425/65R22.5	165K	18	*		16.5	4.0	10.0
	445/65R22.5	169K	20	*		18.5	4.0	10.0

DM03

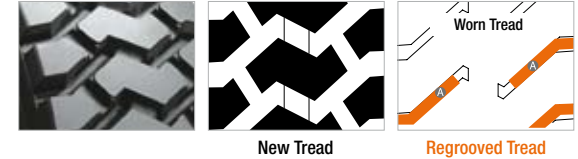


New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
80	11R22.5	148/145K	16	*		20.0	3.0	10.0
	12R22.5	152/148K	16	*		20.0	3.0	10.0
	13R22.5	154/150K	18	*		20.0	3.0	10.0
	315/80R22.5	154/150M(156L)	18	*		21.0	3.0	10.0
	295/80R22.5	152/148K	16	*		20.5	3.0	10.0
TUBE TYPE								
	1100R20	150/146K	16	*		20.0	3.0	10.0
	1200R20	154/150K	18	*		20.0	3.0	10.0

DM04



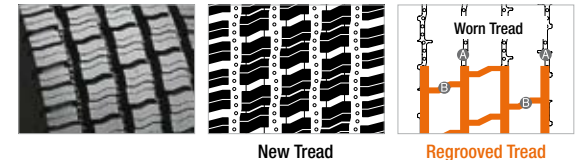
New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	11R22.5	148/145G	16	*		25.0	4.0	14.0
	12R22.5	152/148G	16	*		25.0	4.0	14.0
	13R22.5	154/150G	18	*		24.0	4.0	14.0
TUBE TYPE								
	1200R20	154/150G	18	*		24.0	4.0	14.0

Winter

AW01

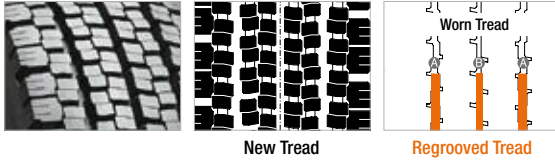


New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
80	295/80R22.5	152/148K	16	*		16.5	4.0	12.0
	315/80R22.5	156/150K	18	*		17.0	4.0	12.0
70	315/70R22.5	154/150L	18	*		16.0	3.0	7.0
65	385/65R22.5	158L(160J)	18	*		16.0	3.0	7.0

DW02

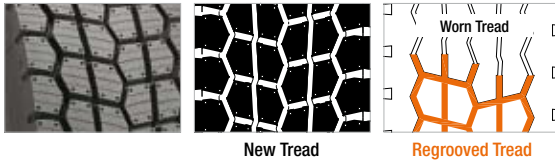


New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	12R22.5	152/148L	16	*	20.5	4.0	12.0	
80	225/80R17.5	152/148L	14	*	16.0	3.0	12.0	
	295/80R22.5	152/148L	16	*	20.5	4.0	12.0	
	315/80R22.5	154/150L	18	*	21.5	4.0	12.0	

DW06



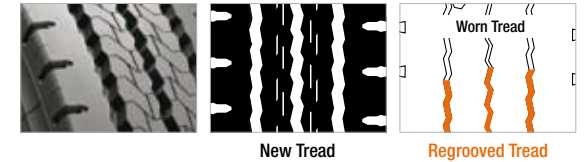
New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
70	315/70R22.5	154/150L	18	*	21.3	3.0	10.0	
80	295/80R22.5	152/148M	16	*	21.3	3.0	10.0	
	315/80R22.5	156/150L	18	*	21.3	3.0	10.0	

Urban

AU03



New Tread

Regrooved Tread

SRS	Size		PR	Type		Tread Depth m/m	Regrooving Depth	Regrooving Width
				T/T	T/L			
TUBELESS								
	11R22.5	148/145J	16	*	19.0	3.0	9.0	
70	275/70R22.5	148/145J	16	*	19.0	3.0	9.0	
80	275/80R22.5	149/146J	16	*	19.0	3.0	9.0	
	295/70R22.5	152/148J	16	*	19.0	3.0	9.0	