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TM/HM/UTV/Pt-III

Date: 23.09.2020

- |  |   |
|--|---|
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Detailed addresses are enclosed herewith.

विषय: यूटीलिटी ट्रैक बहकिल (यू०टी०वी०) फूलटास मशीन, संशोधन-1 की क्रिटिकल स्पेयर्स पार्ट सूची।

Sub: Critical Spares Parts list for (Rev.1) for UTV (Phooltas) Machine.

Ref: CE/TMC/Seminar held on 4th and 5th April 2019.

यूटीलिटी ट्रैक बहकिल (फूलटास) मशीन, संशोधन-1 के क्रिटिकल स्पेयर्स पार्ट सूची, यस.डब्ल्यू.आर. से प्राप्त सुझावों के आधार पर, मसौदा एवं अनंतिम क्रमशः पत्र सं टीएम/एचएम/1 दि 31.12.2019 द्वारा 30 दिनों के लिये, और पत्र सं टीएम/एचएम/यू०टी०वी०/पार्ट. III दि 24.08.2020 द्वारा 15 दिनों के लिये जारी किया गया था परन्तु क्षेत्रिय रेलवे से कोई टिप्पणी प्राप्त नहीं हुई, अब क्रिटिकल स्पेयर्स पार्ट सूची को अंतिम रूप में तैयार किया गया है जिसकी प्रति आपके सूचनार्थ तथा मशीन के कर्मचारियों, जो फील्ड में कार्य कर रहे हैं के मार्ग दर्शन हेतु संलग्न है। यद्यपि उपरोक्त सूची/पुनरीक्षण बनाते समय सभी सावधानियाँ बरती गई हैं, फिर भी यदि कोई त्रुटि हो तो, कृपया अपने सुझावों/टिप्पणियों को ईमेल/फैक्स/पत्राचार द्वारा अधोहस्ताक्षरी को अवगत करायें।

Draft and provisional Critical Spares Parts list for UTV (Phooltas) Machine Rev-1 has been prepared based on suggestion of SWR, circulated vide letter no.TM/HM/1 dt.31-12-2019 for 30 days and letter no.TM/HM/UTV/pt.III dt. 24-08-2020 for 15 days respectively, but no comments received from Zonal Railways. Now critical spares part list has been finalized.

A copy of the same is enclosed herewith for your information and guidance of the machine staff working in the field. However every care has been taken during preparation of the above said list, the discrepancy noticed, if any, may be brought to the knowledge of the undersigned for further improvement by email/fax/post.

E-mail Id- hmtmmrdso@gmail.com

DA: As above

Digitally signed by OM  
PRAKASH  
Date: Wed Sep 30 13:02:49 IST  
2020  
Reason: Approved

(ओम प्रकाश)  
(Om Prakash)  
निदेशक रेलपथ मशीन-III  
Director Track Machine-III

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# INDIAN RAIWAYS

## CRITICAL SPARES OF TRACK MACHINES

UTV-Phooltas  
Rev.-1

September-2020

**RESERCH DESIGNS AND STANDARDS ORGANISATION**  
**Manak Nagar , Lucknow-226011**

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SITE - At machine

STMD – Satellite depot

ZTMD – Zonal depot

## UTV-Phooltas

## ENGINE

S. No	Brief description	Part no.	Nos per M/C	Estt. Life cycle in Yrs.	Requirement per m/c		
					SITE	STMD	ZTMD
1.0	Engine (NTA 855 L)						
1.1	Lub. Oil Pressure Gauge	UTV-07 03/00	2	3	0	0	0.6*
1.2	Engine Lub. Oil	15W/40	45 lts	0.25	50lts	50 lts	125lts
1.3	Oil Temperature Gauge	UTV-07 04/00	1	3	0	0	0.2*
1.4	Transmission Temperature Gauge	UTV-07 05/00	1	3	0	0	0.2*
1.5	Water Temperature Gauge	UTV-07 07/00	1	3	0	0	0.2*
1.6	Transmission Pressure Gauge	UTV-07 08/00	1	3	0	0	0.2*
1.7	Engine self Starter	UTVI -08 04/00	1	3	1	0	0
1.8	Lub. oil bypass switch	UTVI -07 25/00	1	3	0	0	0.2*
1.9	Engine stop Switch	UTVI -07 24/00	1	6	0	0	0.2*
1.10	Fuel Cut off Valve Solenoid	UTVI -09 07/00	1	3	0	0	0.2*
1.11	Alternator	UTVI – 08 05/00	1	3	1	0	0
1.12	Fuel filter	3166555	1	0.25	2	1	1
1.13	Lub. oil filter	3166554	1	0.25	2	1	1
1.14	Lub. Oil by-pass filter	3873576	1	0.25	2	1	1
1.15	Air cleaner element	32260189	1Set	0.3	1	1	1
1.16	V -belt Fan	178570	3	1	0	0	3
1.17	V- belt Water pump	3058383	2	1	0	0	2
1.18	V-belt Alternator	178636	1	1	1	0	0

\*Minimum Quantity- 1

**UTV- PHOOLTAS****HYDRAULIC**

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement per m/c		
					SITE	STMD	ZTMD
<b>2.0 Hydraulics</b>							
2.1	Check Valve ½”	4P17	1	6	0	0	0.2*
2.2	Check Valve ¾”	4P15	1	6	0	0	0.2*
2.3	Secondary Relief Valve	5P11	2	6	0	0	0.2*
2.4	Throttle & Check Valve	6P4	1	6	0	0	0.2*
2.5	Over Center Valve	6P6	1	6	0	0	0.2*
2.6	Over Center Valve	7P6	1	6	0	0	0.2*
2.7	Shut-Off Valve	4P31	1	6	0	0	0.2*
2.8	breather Filler	4P1	1	6	0	0	0.2*
2.9	Emergency Hydraulic Pump Assly.	4P24	1	6	0	0	0.2*
2.10	Hydraulic Filter Element	4P33	1	0.5	1	0	1
2.11	Slew Cylinder	5P10	1	6	0	0	0.2*
2.12	Main Boom Cylinder	7P11	1	6	0	0	0.2*
2.13	Crimp Pressure Hose 3/8” X6500	-	2	3	1	0	0
2.14	Pressure Crimp Hose 3/8” X2500	-	2	3	1	0	0
2.15	Pressure Crimp Hose 3/8” X4000 R1	-	2	3	1	0	0
2.16	Pressure Crimp Hose 3/4” X1000	-	1	3	1	0	0
2.17	Pressure Crimp Hose 3/4” X1000 R1	-	2	3	1	0	0
2.18	Pressure Crimp Hose 1/2” X1500	-	1	3	1	0	0
2.19	Pressure Crimp Hose 1/2” X1200 R1	-	1	3	1	0	0
2.20	Pressure Crimp Hose 3/8” X900 & 1000 R1	-	1	3	1	0	0
2.21	Pressure Crimp Hose 1” X1200 R1	-	3	3	1	0	0

\*Minimum Quantity- 1

## UTV - PHOOLTAS

## MECHANICAL

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement per m/c		
					SITE	STMD	ZTMD
3.0	Mechanical						
3.1	Slotted Nut	UTV-02 32/00	16	6	2	0	0
3.2	Slotted Nut	Utv-02 27/00	12	6	2	0	0
3.3	Self Locking Nut	UTV-02 34/00	32	6	5	0	0
3.4	Nut for Adjusting Stud	UTVI – 04 27/00	16	6	3	0	0
3.5	Bolt ½”-13UNC-2B	UTV-02 22/00	32	6	5	0	0
3.6	Bolt 7/6”-14 UNC-2B	UTV-02 39/00	21	6	3	0	0
3.7	Bolt	UTVI – 03 13/00	16	6	2	0	0
3.8	Bolt	UTVI – 03 16/00	16	6	2	0	0
3.9	‘Hex Nut 7/16”-14 UNC	91380008	2	6	1	0	0
3.10	Hex Head Bolt M12 X 55 L	91010005	10	6	0	0	2
3.11	Hex Head Bolt M20X 140 L	91010135	2	6	0	0	0.4*
3.12	Hex Head Bolt M123 X 40 L	91120043	20	6	0	0	3
3.13	Spring Washer	UTV-02 25/00	4	6	1	0	0
3.14	Hex Head Bolt M 24 X 240	91010094	4	6	0	0	1
3.15	Eye Bolt M 20	91090023	4	6	1	0	0
3.16	Eye Bolt M 20	91090002	2	6	0	0	0.4*
3.17	Hex Head Bolt (Special)	30253002	1	6	0	0	0.2*
3.18	Plain Washer 7/16”	91300018	2	6	1	0	0
3.19	Lower Rubber Washer	UTVI – 03 09/00	08	6	1	0	0
3.20	Brake shoes	UTVI-04 09/00	8	0.5	8	4	4
3.21	Cardon Shaft-2	Utv-02 23/00	1	6	0	0	0.2*
3.22	Cardon Shaft-1	Utv-02 05/00	1	6	0	0	0.2*
3.23	Transmission Position Selector S/W	UTV-07 01/00	1	2	0	0	1

\*Minimum Quantity- 1

## UTV-PHOOLTAS

## ELECTRICAL

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement per m/c		
					SITE	STMD	ZTMD
<b>4.0</b>	<b>Electrical</b>						
4.1	Toggle switch	-	12	3	2	0	2
4.2	Red Light (Right & Left) S/W	UTV-07 16/0A	4	6	0	0	0.3*
4.3	Fog Light S/W	UTV-07 16/0A	1	3	0	0	0.3*
4.4	D.C. Motor	4P26	1	6	0	0	0.2*
4.5	Engine Stop S/W	UTV-07 01/00	1	6	0	0	0.2*
4.6	By Pass S/W	UTV-07 01/00	1	6	0	0	0.2*
4.7	Battery 12V/180 AH	UTVI – 08 01/00	2	3	0	0	0.4*
4.8	Bulb for head light	-	2	1	1	0	1
4.9	Bulb for search light	-	1	1	1	0	0
4.10	Bulb for red light	-	4	1	2	0	2
4.11	Bulb for fog light	-	1	1	1	0	0
4.12	Bulb for flush light	-	1	1	1	0	0
4.13	Buzzer	UTVI -09 13/00	1	3	0	0	0.3*
4.14	Panel Main S/W	UTV-07 11/00	1	3	0	0	0.3*
4.15	Tachograph	UTV-07 12/00	1	3	0	0	0.3*
4.16	Transmission position selector Switch	UTVI-07 22/00	1	2	0	0	0.5*
4.17	D.C. Motor	4P26	1	6	0	0	0.2*
4.18	Engine Lube Oil pressure Sensor	UTVI -09 01/00	1	3	0	0	0.3*
4.19	High Water Temperature Sensor	UTVI -09 02/00	1	3	0	0	0.3*
4.20	Relay	UTVI -09 08/00	1	3	0	0	0.3*

\*Minimum Quantity- 1



## UTV-PHOOLTAS

## PNEUMATIC

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement per m/c		
					SITE	STMD	ZTMD
<b>5.0</b>	<b>Pneumatic</b>						
5.1	1" Check Valve	UTV-06 04/00	2	2	0	0	1
5.2	Unloader Valve	UTV-06 05/00	1	2	0	0	0.5*
5.3	Auto Drain valve	UTV-06 07/00	1	2	0	0	0.5*
5.4	J-1 safety Valve	UTV-06 09/00	1	2	0	0	0.5*
5.5	C-2-W Relay Valve	UTV-06 13/00	1	2	0	0	0.5*
5.6	'D' Check Valve	UTV-06 14/00	1	2	0	0	0.5*
5.7	Parking Brake Valve	UTV-06 15/00	2	2	0	0	1
5.8	Throttle Lever Valve	UTV-06 17/00	1	2	0	0	0.5*
5.9	Emergency Brake Valve	UTV-06 19/00	1	6	0	0	0.2*
5.10	Single Solenoid Valve	UTV-06 20/00	1	2	0	0	0.5*
5.11	Pressure Reducing Valve	UTV-06 22/00	2	2	0	0	1
5.12	Pressure Protection Valve (Optional)	UTV-06 24/00	1	2	0	0	0.5*
5.13	SA-9 Ind. Brake Valve	UTV-06 25/00	1	2	0	0	0.5*
5.14	HS-4 Control Air Valve	UTV-06 32/00	1	2	0	0	0.5*
5.15	Check Valve (Flap type)	UTV-06 34/00	1	2	0	0	0.5*
5.16	VA-VI Controlled Valve	UTV-06 35/00	1	2	0	0	0.5*
5.17	Pressure Reducing Valve-2.5 KSC	UTV-06 36/00	1	2	0	0	0.5*
5.18	Dual Air Pressure Gauge	UTV-06 28/00	1	6	0	0	0.2*
5.19	4" v BPC Single Pressure Gauge	UTV-06 29/00	1	6	0	0	0.2*
5.20	Shut-off Cock ¾"	UTV-06 10/00	1	6	0	0	0.2*
5.21	Throttle Cylinder	UTV-06 18/00	1	2	0	0	0.5*

\*Minimum Quantity- 1

S. No	Brief description	Part no.	Nos per M/C	Estt. life cycle in Yrs.	Requirement per m/c		
					SITE	STMD	ZTMD
5.22	Polourethane calibrated 98 shore (plastic pipe)	Size 4 x 6 mm	15 mts	1	15 mts	0	15 mts
5.23	Polourethane calibrated 98 shore (plastic pipe)	Size 6.5 x 10 mm	15 mts	1	15 mts	0	15 mts
5.24	Polourethane calibrated 98 shore (plastic pipe)	Size 10 x 14 mm	15 mts	1	15 mts	0	15 mts
5.25	Low Pressure Switch 4.9 bar NC	UTV-06 31/00	1	3	0	0	0.3*
5.26	Manifold-5Ports	UTV-06 43/00	1	3	0	0	0.3*
5.27	Direction Change Cylinder	UTV-06 44/00	1	2	0	0	0.5*
5.28	Range Selector Cylinder	UTV-06 45/00	1	2	0	0	0.5*
5.29	Shut Off cock-1/2"	UTV-06 52/00	2	2	0	0	1
5.30	Single Solenoid Valve (MFH-1/8")	UTV-06 53/00	4	2	1	0	1
5.31	Shut-off Cock 3/4'	UTV-06 10/00	1	2	0	0	0.5*
5.32	Shift Cylinder Solenoid	UTVI – 08 15/00	4	3	0	0	1
5.33	Air Strainer	UTV-06 08/00	1	3	0	0	0.3*

\*Minimum Quantity- 1

**Note:-** Any other items which the Zonal Railways decide as per condition and safe operation of machine shall be kept on the machine.

**ACKNOWLEDGEMENT**

Following officers and staff have made their valuable contributions in finalization of the Critical Spare Parts list (Rev.-1) for UTV (Phooltas).

**Railway****S.W. Railway****RDSO****1. Shri Muslim Ahmad****ARE/TM****2. “ ” Ved Prakash Srivastava****SSE/TM**