Below Elbow Prosthesis (Body Powered)

CARE & MAINTENANCE





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WHO ARE THE USER?

PERSON AFFECTED WITH :-

Loss of Upper Limb(Below the Elbow Joint)

DUE TO:-

Trauma or Accident

(Agriculture Machine Injuries, Road Traffic Accident, War Injuries)

Chronic Infection

Vascular Disease

Bone Or Soft Tissue Tumor

Congenital Anomaly

etc.



RESULT IN....

PHYSICAL COMPONENTS: -

- Disfigurement of Body
- Loss of Physical Component of Body
- Loss of Prehensile Function of Hand
- Loss to Sensation at terminal End of Upper Limb
- · Loss of intricate functional ability of wrist & hand joints

PSYCHOSOCIAL: -

- Feelings of Incompleteness of Body Image
- Grief Anxiety and Depression
- Loss of work (Vocational Activities)
- Restricted Particiaption

HOW IT HELPS?

PHYSICAL COMPONENTS: -

- · Compensate for Bony Segmental
- Improve Functional Capability
- Improved Body Image

PSYCHOSOCIAL: -

- Feeling of Completeness
- Cosmetic Appealing
- Encourage Self Confidence & Motivation
- Assist in Day to Day Life Skill Activities (ADLs)
- Assist in Return to Work
- Improve Particiaption

HOW YOUR PROSTHESIS SHOULD BE?

• <u>Prescribed</u> by Physiatrist, Orthopaedic Surgeon & Prosthetist



Biomechanically Designed & Fabricated



• Biocompatible (Skin Compatible)



Light Weight & Strong (Save Energy Expenditure)



Comfortable (Happy to Wear It)



Durable & Less Expensive



• Cosmetic Appealing



• Simple & easy to Repair



• User Friendly





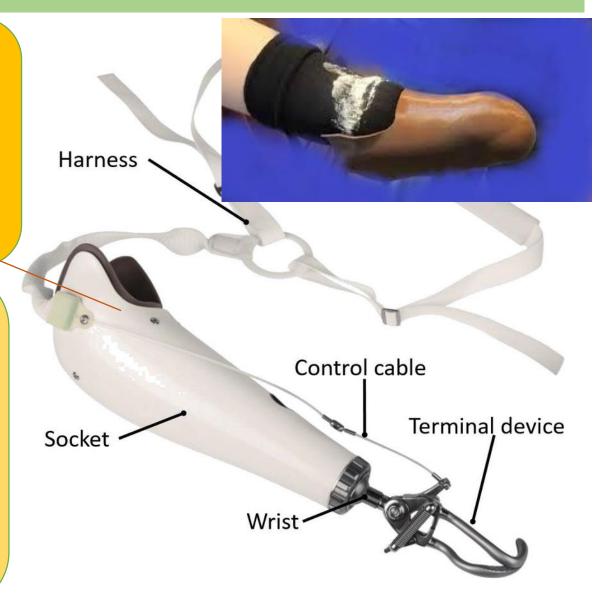
KNOW YOUR PROSTHESIS: SOCKET

SOCKET: Fabricated of polypropylene oraplastic resin reinforced with fibre. It is the receptor of your stump. It should be comfortable & painless while wearing

WARNING: - Any discomfort or pain immediately report Prosthetist.

CARE & MAINTENANCE:

- Daily cleaning (USE ANTISEPTIC LIQUID + LUKE WARM WATER+ SOFT CLOTH)
- Use old toothbrush to clean narrow area (inaccessible area)
- Dry thoroughly over night
- Check for any Crack/ Deformation
- Don't add any foreign material inside the socket
- Use cotton stump socks
- Keep away from direct heat/ temperature



KNOW YOUR PROSTHESIS: WRIST UNIT

WRIST UNIT: A Mechanical component connect proximally with socket/forearm piece and distally terminal device(Hand/Hook)

Material: Stainless Steel + Aluminium

WARNING: - Don't open & manipulate internal parts - immediately consult Prosthetist for repair/replacement

CARE & MAINRTENANCE:

- Take to the Prosthetist for servicing of internal parts at least once in six months.
- Wrist unit allow you to change the terminal device as per need; don't mess with it.
- Where ever possible oil it (Avoid too much it will lit your cloth)
- Clean with dry cloth (Avoid Wet cloth to prevent rust)



KNOW YOUR PROSTHESIS: TERMINAL DEVICE(TD)

TERMINAL DEVICE: This is your working tool it may be hand or hook type · proximally connected with wrist unit · Hand type is complex design covered with PU/Silicone/ Nylon/ PVC material & cosmetic cover · Hook type is simple in design & more functional but less cosmetic

ATTENTION: Keep stock more than one type of terminal device

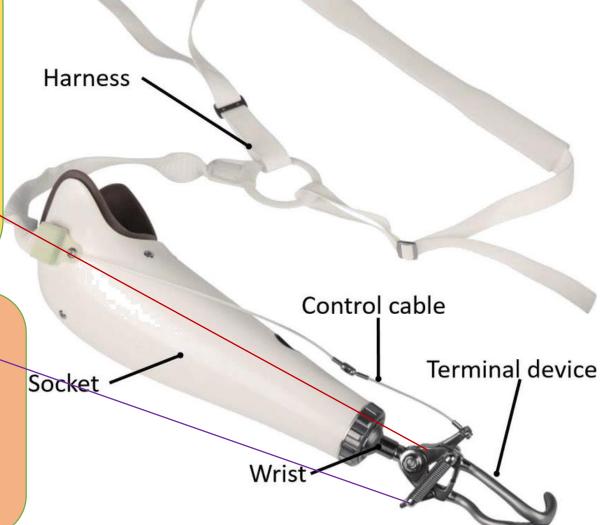
SOME OPTIONS OF TERMINAL DEVICES:











KNOW YOUR PROSTHESIS: TERMINAL DEVICE (TD)

CARE & MAINTENANCE (TERMINAL DEVCIE)

CONTD....

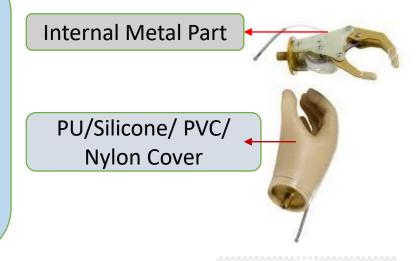
HAND TYPE:

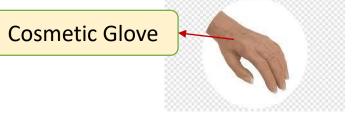
- Never remove the cover
- Never try to manipulate internal metal parts
- The cover & cosmetic cover is heat sensitive, keep away from these
- Don't direct expose to sunlight for long period(Color will fade)
- Keep away from staining material(Pen ink, Paint, Lipstick etc.)
- · Daily clean it with mild soap & water.
- Check for any tear or crack

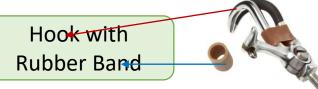
HOOK TYPE:

- Oil the moving part (Occasionally use machine oil & in very little amount)
- Carry spare rubber band (change it as & when required)
- Keep Abrasive material away
- Inspect for any WEAR/ TEAR

WARNING: 1. NEVER USE AS HAMMER OR STRIKING TOOL
2. NEVER USE AS AN ANCHOR FOR OTHER OBJECTS







KNOW YOUR PROSTHESIS: HARNESS

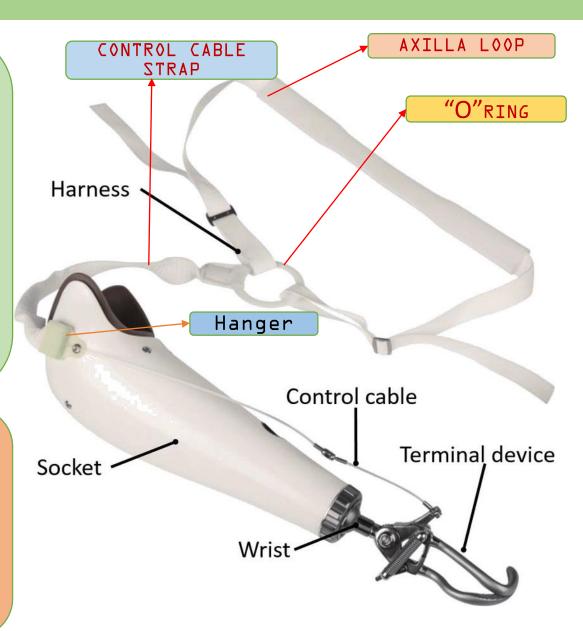
HARNESS:

- AXILLA LOOP encircle your opposite side of amputated limb.
- It act as anchor for transmitting your muscle power(Shoulder Motion) to the terminal device
- At centre of your upper back it is attached with "O" Ring
- · It should fit snugly around the axilla
- CONTROL CABLE STRAP originate from 'O'Ring and terminate at Hanger of Control cable.
- "O"RING is located at your upper back encircling seventh cervical vertebra.
- MATERIAL: COTTON OR, NYLON + METAL BUCKLE+ FOAM

CARE & MAINTENANCE:

- Axilla loop should be well soft foam padded
- Don't overtight around axilla
- Weekly clean with mild soap & water
- Keep wrinkle & stain free
- Keep leather part clean & Dry(Use saddle soap)

ATTENTION: FOR RPAIR & REPLACEMENT CONSULT YOUR PROSTHETIST



KNOW YOUR PROSTHESIS: CONTROL CABLE

CONTROL CABLE:

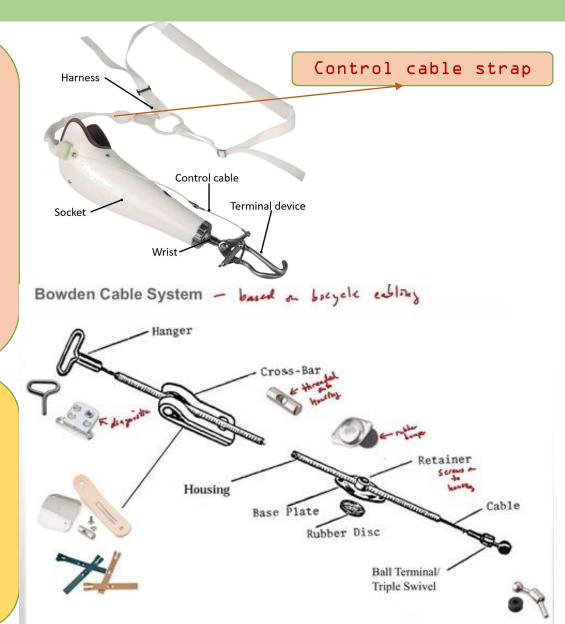
- It transmit the muscle power to the terminal device for opening & closing and holding the object.
- The holding duration & strength depends on your muscle power applied(joint motionshoulder & elbow)
- It has facility to detach & engage with different types of TD
- Proximally attached control cable strap & distally with TD

Material: Polypropylene/Nylon housing in metal case

CARE & MAINTENANCE:

- Check for any worn, bent or frayed.
- · Cable should not have any sharp bend
- If your cable is passing through cross-bar & base plate Retainer, make sure housing is properly secure & allow smooth movement of cable
- Check for any other component damage

ATTENTION: For any repair & replacement consult Prosthetist



KNOW YOUR PROSTHESIS: TRICEPS CUFF

TRICEPS CUFFS:

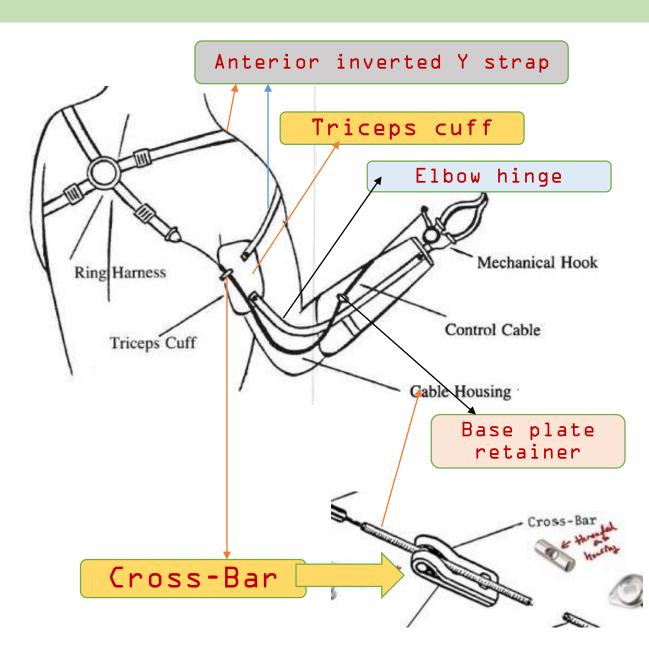
- Located over the triceps bulge of amputated side.
- It guide control cable via cross bar & cable housing.
- Proximally attached with anterior inverted Y strap (medial- lateral) & distally with elbow hinge.

MATERIAL: Leather/ Plastic

CARE & MAINTENANCE:

- Check & inspect for proper location.
- check for any twist of crossbar(if any untwist it).
- Check for any worn Or tear.
- Clean with dry cloth

ATTENTION: Consult Prosthetista if required



KNOW YOUR PROSTHESIS: ELBOW UNITS

ELBOW UNITS:

- Proximally connected with triceps cuff/pad & distally with socket.
- It helps to prevent rotation of prosthesis over the stump
- Depending on prescription & design it may be flexible or rigid type.

MATERIAL: Metal/ Non-metal

FIGURE-8 HARNESS TRICEPS PAD Anterior Inverted Y strap **FLEXIBLE** PLASTIC SOCKET Elbow hinges VO HOOK

CARE & MAINTENANCE:

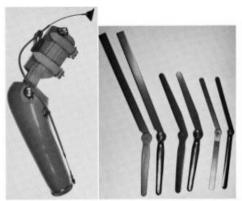
- Check for any twist (If at fabricated from leather/ fabric/thin plastic)
- Oil it (If it is articulated metal joint)
- Clean with Dry cloth.

ATTENTION: For any repair/ replacement consult Prosthetist

Elbow units

Flexible hinges Rigid hinges





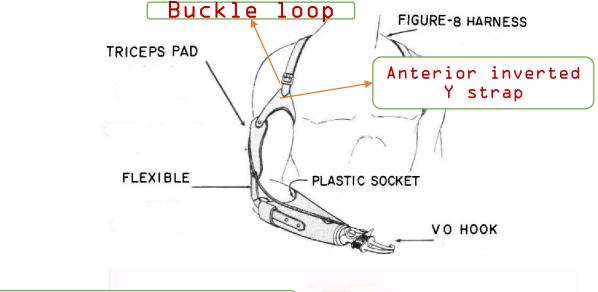
KNOW YOUR PROSTHESIS:

ANTERIOR INVERTED "Y" STRAP

ANTERIOR INVERTED "Y" STRAP:

- It is a part of harness.
- It run as a single strap from "O" Ring over the shoulder and fall downward in the Deltopectoral Groove and then split into inverted "Y" shape and join the Triceps Cuff(medially & Laterally).
- It helps to suspend the prosthesis as well as stabilise the triceps cuff.

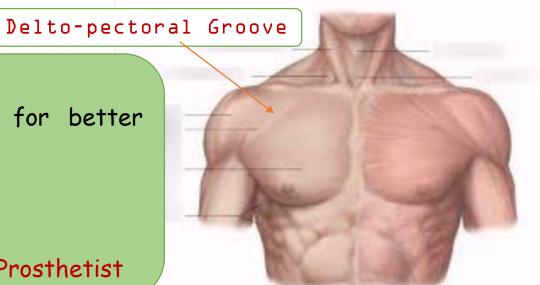
OPTIONAL: Buckle loop, for detachment



CARE & MAINTENANCE:

- It must pass through the deltopectoral groove for better function & discomfort while functioning.
- Remove twist, if any
- It should be well padded
- Clean it regularly as per harness instruction.

ATTENTION: for any repair/ replacement consult Prosthetist



KNOW YOUR PROSTHESIS: STUMP SOCKS

STUMP SOCKS:

- It is worn over the stump
- It protects skin from direct contact with the socket.
- It absorbs the sweat generated due to heat inside the socket.

MATERIAL: Cotton/ Silicone Gel



CARE & MAINTENANCE:

COTTON SOCKS-

- Wash daily with mild soap+ water
- Change it daily
- Wear it wrinkle free

SILICONE GEL SOCK/LINERS-

- Avoid contact with ball point pensinewsprint, vegetable dyes, etc.
- Inspect for sign of wear & tear
- Follow the manufacturers instruction

ATTENTION: If you have any problem- consult Prosthetist

FOR FURTHER INFORMATION: TO- niepmd@gmail.com



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